Third Annual Report

OF

The Horticultural Societies of Ontario

For the Year

1908

(PUBLISHED BY THE ONTARIO DEPARTMENT OF AGRICULTURE)

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1909.

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TORONTO.

To the Honourable JOHN MORISON GIBSON, K.C., LL.D., *etc., etc., etc.,*
Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the honour to present herewith for the consideration of Your Honour the Report of The Horticultural Societies of Ontario for the year 1908

Respectfully yours,

JAS. S. DUFF,

Minister of Agriculture.

TORONTO, 1909.

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ANNUAL REPORT

OF

The Horticultural Societies

OF ONTARIO

1908

To the Honourable James S. Duff, Minister of Agriculture

Sir,—I have the honour to present, herewith, the Third Annual Report of the Horticultural Societies of Ontario for the year 1908. It contains a report of the proceedings of the Annual Convention of the Ontario Horticultural Association, with many valuable addresses given thereat, a statement of the receipts and expenditure of the societies in the Province, a comparative statement of members and Legislative grants for 1907 and 1908, and other information in connection with the working of these progressive institutions.

I have the honour to be, Sir,

Faithfully yours,

J. LOCKIE WILSON,

ONTARIO HORTICULTURAL ASSOCIATION.

OFFICERS FOR 1909.

President..MAJOR H. J. SNELGROVE, Cobourg.
1st Vice-President..R. B. WHYTE, Ottawa.
2nd Vice-President..R. CAMERON, Niagara Falls.
Treasurer..H. B. COWAN, Peterboro.
Secretary and Editor..J. LOCKIE WILSON, Toronto.

Directors:

REV. A. H. SCOTT, M.A., Perth; W. JEFFERS DIAMOND, Belleville; MISS BLACKLOCK, Toronto; A. ALEXANDER, Hamilton; JAS. MITCHELL, Goderich; GEO. W. TEBBS, Hespeler; J. S. PEARCE, London.

Honorary Directors:

W. B. BURGOYNE, St. Catharines; W. T. MACOUN, C.E.F., Ottawa; H. L. HUTT, O.A.C., Guelph;

Auditors:

A. O. JEFFREY, M.D., London; J. A. ELLIS, Ottawa.

COMMITTEES FOR 1909.

On Nomenclature: R. CAMERON, Niagara Falls; JNO. CAVERS, Oakville; H. B. COWAN, Peterboro; WM. HUNT, O.A.C., Guelph; W. T. MACOUN, C.E.F., Ottawa; J. LOCKIE WILSON, Toronto.

On Novelties: W. T. MACOUN, C.E.F., Ottawa; PROF. H. L. HUTT, O.A.C., Guelph; MISS BLACKLOCK, Toronto.

Press Committee: JNO. CAVERS, Oakville; W. T. MACOUN, C.E.F., Ottawa; REV. A. H. SCOTT, Perth.

Committee on the Incorporation of Horticultural Topics in new series of School Books: REV. A. H. SCOTT, Perth; W. B. BURGOYNE, St. Catharines; J. S. PEARCE, London.

Ontario Horticultural Association

ANNUAL MEETING.

The third Annual Convention of the Ontario Horticultural Association, which was held in the City Hall, Toronto, on Tuesday and Wednesday, November 10th and 11th, 1908, was the most successful in the history of the organization. Enthusiastic delegates were present from all parts of the Province. There was no lack of interest from the first session to the last. All seemed imbued with a determination to make the coming year an epoch-marker in advancing the cause of Horticulture and civic improvement in Ontario.

PRESIDENT'S ADDRESS.

By Major H. J. Snelgrove, Cobourg.

It is with the greatest possible pride and pleasure that I welcome you here at our third annual Convention. During the year your executive have been aided by the valuable services of our new Superintendent, Mr. J. Lockie Wilson, who had previously taken a prominent part in the great field of Agriculture. During the past year he has most zealously and faithfully applied himself to the interests of our Association, which we all know he has closely at heart.

I am proud to congratulate our officers and members on a successful year's work. While the Association has given an impetus to improvement in Horticulture, its chief aim may be summed up in the word, education. Our enthusiasm has been increasingly directed to heightening happiness by disseminating knowledge through the aesthetic tastes and sentiments of our people.

The chief functions of our Association in this forward movement are to investigate, to discover, to lay the experience of mankind under tribute to encourage the pioneers, to inform the workers, to develop plans and to secure means to agitate and to create public opinion, to improve and guide the work, until it has been assimilated in the life of the community.

Our only object is the benefit of the common people. What is more elevating in the moral sphere, or what is more conducive to the health and wealth of the Province in things material, than the work in which we are engaged? The topics here discussed are of vital interest to thousands of our fellow men.

The example of a real work of public service such as we are rendering is like an electric torch held aloft by the arm of a lofty statue, which casts its refulgent beams far over the troubled waves of life.

Such a programme as is here presented may assist active workers in the limited fields to appreciate the labors of others, increase the feeling of mutual fellowship between our affiliated societies, lead to co-operation, and enable those who are prone to regard with suspicion the efforts of social reformers, to hold them in honor and esteem.

A Fine Home at Cobourg.

Photo from Major H. J. Snelgrove

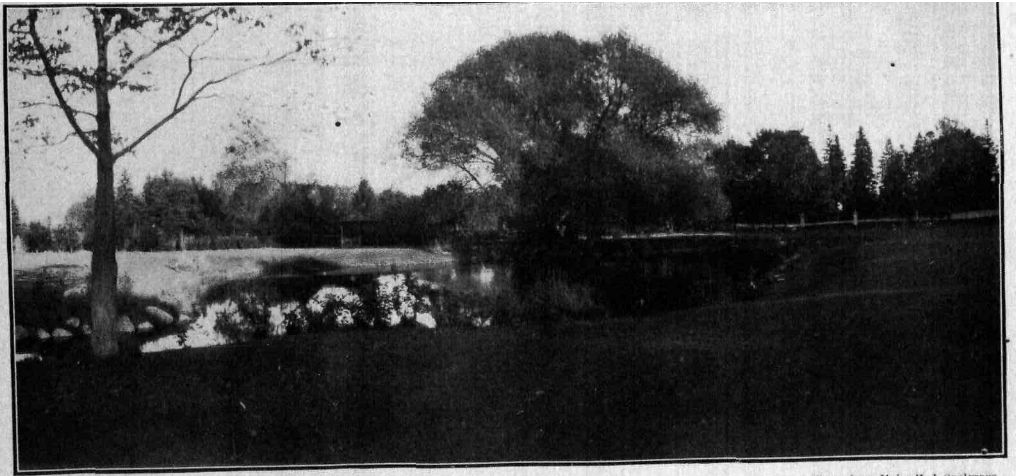


Photo from Major H. J. Snelgrove.

A Private Park and Fish Pond at Cobourg.

The theme of my address is "The Ministry of Beauty." The unit of the nation is the home. That word means the family and its residence, with a thousand objects and memories which surround the world with sentiments beautiful and tender. It is in the family that all citizens learn the lessons of usefulness, self-sacrifice and co-operation, essential virtues in the general work of mankind.

If for any reason parental duty remains neglected, then the community, the church, the society, the state, must supply the defects and that means that certain persons, perhaps in addition to their own duties, must carry part of the burdens of others. Thus we see that all society is interested in the conduct and welfare of each family. In some homes we merely notice an inferior intelligence, in other instances there is positive misery. Tidiness, cleanliness, happiness are impossible. The family life is starved and sterile. *The house is a mere place in which to eat and sleep. Existence is on the* animal plane. The husband has no chance to cultivate a human quality, and the bar-room seems to him a paradise. Such men move in a fatal circle.

Not only should the physical wants of every domestic circle be supplied, but the intellectual atmosphere should be charged with high thoughts and lofty ideals. The sense of beauty should be developed by flowers, pictures and music. Is it not for lack of these elements of a happy home life that we find so many boys and girls aimlessly roaming the streets after dark exposed to direful temptation and evil influences?

We make our homes and they turn upon us the image of our own tastes and permanently fix them in our nature. Our gardens and our environment deaden or brighten our souls. The dwelling, its walls, windows, furniture, pictures, ornaments and flower beds, all act constantly upon the imagination and determine its ideal. If a family realizes this truth, it will seek to beautify the objects which are silently and increasingly writing their nature upon the man within the breast. When the families of a community give no heed to this truth, there is room for missionary work by the Horticultural Society. This is the logical argument for our existence as an Association. The activity of shaping intelligence becomes in this connection an important factor in the life of the state.

Refined desires quicken ingenuity and give force to industry. In this practical age the air is rife with schemes of betterment, many of which, like early May blossoms, will perish frost-nipped and wind shaken.

All that is achieved in the sphere of voluntary action must be the result of personal enterprises and patient toil. Man cannot be blessed in spite of himself. The sluggard's garden will always raise a luxuriant crop of burs and nettles so long as it is neglected.

"You will hear every day," said Ralph Waldo Emmerson, the inspired prophet of New England, "the maxims of low prudence. You will hear that the first duty is to get land and money, place, and name. 'What is this truth you seek? What is this beauty?' Men will ask with derision. If, nevertheless, God hath called any of you to explore truth and beauty, be bold, firm, and true."

Thus let us unite to promote the elements of popular welfare. It is the duty of the Government not only to protect the lives and property of its citizens, not only to foster its industries, but to encourage a refined taste in the home-making of its subjects.

The final cause of education is not near industrial efficiency, but that for which mechanical skill is itself a means, viz., the production of a complete and happy life. *For our education to be useful in the true sense of the* term, we cannot ignore the training of the aesthetic faculties as much for moral as for utilitarian ends.

A Beautiful Driveway in Cobourg.

Photo from Major H. J. Snelgrove.

If we are to provoke a revulsion against untidy streets, hideous alleys, tumble down houses, repulsive garbage heaps, offensive advertisements of black and yellow on dead walls and mountain sides, we must become teachers of beauty. Against these gross abuses of the senses of sight and smell, our school children should be taught to wage strenuous warfare. Beauty is good in itself. A tree may bear no fruit, but if symmetrical and casting a grateful shade it is useful.

Listen to the song of nature, so beautifully interpreted for us by Sidney Lanier in his "Symphony":

"Whence and Why
Man's tender pain, man's inward cry,
When he doth gaze on earth and sky?

I speak for each no-tongued tree
That, spring by spring, doth nobler be,
And dumbly and most wistfully
His mighty prayerful arms outspreads
Above men's oft unheeding heads,
And his big blessing downward sheds.
I speak for all shaped blooms and leaves,
Lichens on stones and moss on eaves,
Grasses and grains in ranks and sheaves,
Broad fronded ferns and keen-leaved canes,
And briery mazes bounding lanes.

So Nature calls through all her system wide,
Give me thy love, O man, so long denied.
But Oh, the poor! the poor, the poor,
That stand by the inward opening door
Trade's hand doth tighten evermore,
And sigh their monstrous foul-air sigh
For the outside hills of liberty."

There is one great art which every family in the nation can cultivate and which all local and municipal governments and associations can assist; the art of making the face of Nature beautiful.

Where shall we begin? Perhaps with window gardens overlooking a dusty street. At least we shall have one spot of color. Only a pot of earth and a few seeds may give hints of a regained Eden. Or if the home is a cottage, with sufficient space between wall and walk for only a few plants, the narrow plot shall tell the passer-by a story of peace and aspiration, and make him wish as pretty a picture for the eyes of his own wife and children. The rude laborer may be redeemed from his degrading pleasures by the garden and the flowers.

The ugliness of our towns and villages usually arises from the fact that they are like original chaos, without form or plan; the creation of mere individualism. Each man builds his own house as he pleases or as he can. The result is a wilderness of irregularity. Here is a shabby shack next door to a handsome business block, a grimy coal yard opposite a well appointed hotel, a vacant lot overgrown with weeds and thistles adjoining a neatly trimmed lawn in front of a church, a wild and disorderly wood yard opposite a public park. Mutual respect, municipal pride will some day put an end to this unseemly state of affairs and bring beauty and order into slumdom, where so many of our people are compelled to dwell and rear their children. Missionaries of beauty are wanted to enlist in this crusade against ugliness. But it will require a long struggle with stupid apathy and vulgar indifference before the rude pioneer arrangements of our towns and villages are transformed into what the poet calls "a vision, a delight, a desire."

We need city commissions who will call in a competent landscape specialist to plan their parks and open spaces. For example, the visitor to Detroit can see at Belle Isle what a genuine artist can make of a perfectly flat and swampy piece of ground. Look again at Holland, the flattest country is Europe, much of the soil of which was originally sand in which no plant would grow. The land has been redeemed and fertilized, trees planted, flowers cultivated and the naked sterile earth covered with living forms of beauty.

Look again at New England villages, where a charming refinement is manifest in universal flower-gardens, water courses lined with all varieties of shrubs, and highways have become avenues of stately trees. In our own country the finest example of systematized effort is seen in the splendid work of the Civic Improvement Commission, which is rapidly transforming the Federal Capital, less than fifty years ago a huge lumber yard, into the Washington of the North.

There are many improvements to be made that will increase our sum of beauty, of refinement and of general cultivation in every community, thus adding to the national happiness of hundreds of thousands of fellow Canadians unhampered by traditions which produce stagnation rather than progress. We should courageously press forward with the work that deserves and I believe will receive a loyal support of the public-spirited people of Ontario.

In union there is strength.

Julia Ward Howe's name gives high sanction to the thought of seeing the best men and women move in sympathy and harmony and linked together by zeal and service to all ranks of their fellow-creatures; this is what each owes to his country.

The chant of the poet of English Socialism projects a vision worth cherishing in this free land of Canada:

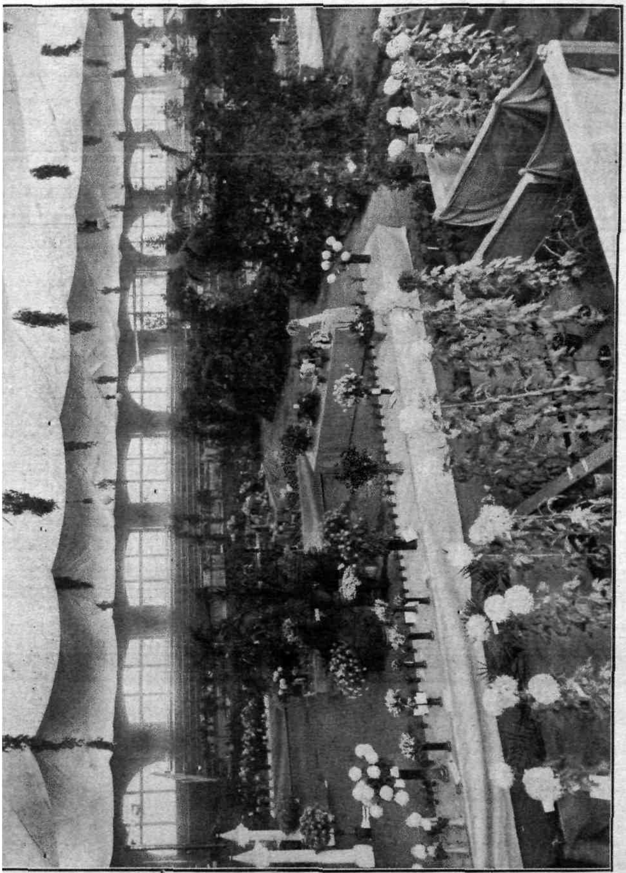
> "And what wealth, then, shall be left us, when none shall gather gold,
> To buy his friend in the market, and pinch and pine the sold?
> Yea, what but the lovely city, and the little house on the hill,
> And the wastes and the woodland beauty, and the happy fields we till?

REPORT OF THE SUPERINTENDENT.

By J. Lockie Wilson, Toronto.

In presenting this my second report as Superintendent, and as your Secretary and Editor, I am pleased to be able to state that the year just closed has been one of progress. With a few exceptions, the Horticultural Societies throughout the Province are extending their work, increasing their membership and devoting their energies not only for their own special benefit, but also for the beautifying of the cities, towns and villages which are their headquarters.

A number of meetings have been held in different parts of the Province to which speakers were sent, whose expenses were in part paid by the Department. Notable among these were the ones held in St. Catharines, Hamilton, Toronto, Cobourg and Perth, at which Mr. J. Horace McFarland, President of the American Civic Association, delivered addresses. His lectures were of great interest, and being illustrated with stereopticon views, were greatly appreciated by all who heard them. Mr. McFarland is so filled with



Ontario Horticultural Exhibition, Toronto, 1908.

Ontario Horticultural Exhibition, Toronto, 1908.

enthusiasm for civic improvement that he never fails to make an excellent impression on his hearers, who go away from these meetings with a high resolve to become themselves enthusiastic disseminators of the gospel of Civic Improvement. The Directors of the American Civic Association are anxious to co-operate with us in every possible way, and a proposition has been made for our affiliation with them. This is a question which should receive the attention of this Association, as they are a much older organization than ours and have accummulated a valuable fund of literature which would be of great assistance to us in our work. You will doubtless, be pleased to hear that the first move in the direction of closer connection was to make your Superintendent an honorary member of that body, which is doing such splendid work in beautifying the homes of American citizens.

We have to express our hearty thanks to Messrs. Hutt and Hunt, of the Ontario Agricultural College, Guelph, for their valuable assistance in promptly responding to the call to speak at different meetings. A number of amendments to the Act respecting Horticultural Societies were passed at the last Session of the Legislature, which were in substance as folows:—

Section 9, subsection 2, has been amended so that instead of a society being limited as formerly to an expenditure of not more than one-third of its total receipts in any particular line of work, it is now legitimate to expend up to one-half for such purposes.

The annual meetings of societies must now be held during the first week in November. If through any cause a society fails to hold its meeting during the said first week the Minister of Agriculture on petition of twenty members may appoint a time for holding the same not later than December 31st in the same year.

In the event of the annual meeting not being held previous to December 31st, or if the number of members on July 1st in any year is less than the number required for organization, the society shall not be entitled to any further grants and shall be deemed to have been dissolved. The change in *this section is in the date, which has been extended from May 1st to July 1st.*

In section 12 referring to the dates when the reports are to be sent to the Department, the words "within one month" have been changed to read "not later than the first day of February." There has also been added the following sub-sections: "The Minister may require that any of the statements referred to in the above reports shall be attested by affidavit in such form as he may prescribe." Section 17 (A) with reference to the affidavit to be furnished now reads as follows:—"On or before the first day of July, of each year, the officers of every society shall send to the Department an affidavit that may be sworn to before any Justice of the Peace or Commissioner, stating the number of members in good standing at the time of making the same." This declaration, as will be seen, now covers only the number of members, and does not contain a statement of the expenditure for various purposes. I am of opinion that the Act should be amended so that the affidavit should cover the expenditure as well. The affidavit only asks for the number of members; you will agree with me that that should be amended and the sworn statement include the expenditure.

That declaration was put in the Agricultural Societies' Act. The Treasurers are required to swear to the number of members on a certain date, and also to the expenditure for agricultural purposes. I do not suppose any officer of a Horticultural Society would wish to misrepresent the facts in his statement in order to get a larger grant, but we must be above suspicion and the Department will arrange to have the Act amended in this connection.

Clause B. of section 19, which provides for the division of the legislative grant, has been changed. The words "as shown by their sworn statements provided for in section 17" now read "in accordance with the provisions of section 19."

The special $800 grant to Horticultural Societies in cities having a population of thirty thousand or over is now based on the membership of the preceding year, instead of the current year as previously. An additional clause to section 19 makes the following provisions:—"Societies in the first year of their existence shall receive grants at the rate of $1.00 for each paid up member on the first day of July, said grant not to exceed $100." These, in brief, are the amendments to the Act. Among the Societies in the Province which have made a decided advance both as regards membership and the work done during 1907 and 1908 are Ottawa and St. Catharines. This has resulted in an increase of the grants to them, Ottawa securing $135 and St. Catharines, $430 more this year than last. Under the Agricultural Societies Act, the maximum grant allowed to any society is $800. I would suggest that the Horticultural Societies' Act should have a similar clause, defining the maximum amount which a society should receive.

A partial reason for the decrease in the grants to some of the societies is that under one of the amendments of the Act new Societies which have a paid up membership list of 100 on July first, can receive a grant of $100. Three new ones qualified for this amount this year, viz., Amherstburg, Sault Ste. Marie and Walkerville. If through your efforts fifteen new societies were organized in any one year, the amount to be divided among the older ones would be seriously impaired. This would seem to be a deterrent to the efforts of established organizations to extend the good work.

The following shows the comparative units on which the grants for 1907 and 1908 are based:—Membership, 1907, 37; 1908, 37. Expenditure, 1907, 32; 1908, 26.

The number of societies in good standing at present is 60. No returns for 1907 were received from the following:—Dunnville, Niagara Falls, Orillia and Preston. Orangeville made only partial returns but held no annual meeting. The amount of grant paid to these five societies in 1907 was $476, and their membership was 421. The total membership of societies in good standing up to this date as reported is 7,500. When all returns are in we shall have over 2,000 more members than last year.

You will notice that one society that dropped out was not bankrupt; it had two hundred dollars to its credit and it handed over the funds to some other organization, and that was quite illegal. Any monies in the hands of a society that passes out of existence should be returned to the Department to be divided up as it sees fit.

In 1908, sixteen societies out of sixty affiliated with the Central Association. I have written several times to the secretaries asking them to affiliate and participate in the benefits derived from belonging to this organization. So far twenty-eight have sent in their affiliation fees for 1909. I would suggest that the Directors appointed for each district, if they find it impossible to personally visit all the societies which they represent should at least get in touch with them by means of correspondence. In this way they could give valuable assistance and advice to small societies which would be greatly benefited by outside help in creating enthusiasm among their members in carrying on the beneficent work of beautifying the homes and surroundings of their town. Provision, I think, should be made for paying the expenses of the directors while engaged in such work. I wish

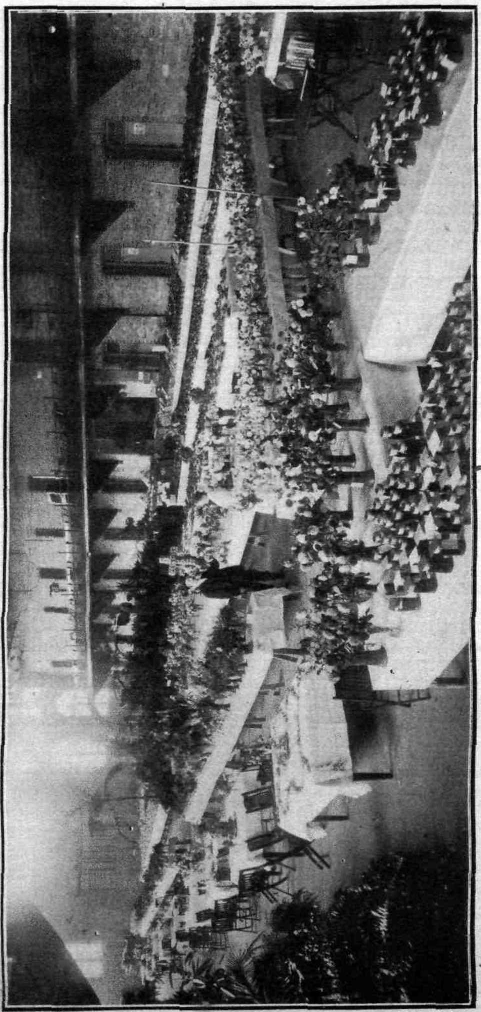


Photo from W. B. Burgoyne.

St. Catharines Horticultural Exhibition, 1908.

to convey my thanks to our President and Messrs. Whyte, Burgoyne and Cowan for the excellent photographs and illustrations with which they supplied me for my last Annual Report. I take this opportunity of asking the members of Horticultural Societies throughout the Province to lend their assistance in procuring photographic views of gardens, lawns and flowers for our next report, which will add materially to its educational value and usefulness.

There is no institution in the Dominion of Canada that has a tendency to do greater and better work for the uplift of humanity than the Ontario Horticultural Association. I know whereof I speak, and with enthusiastic workers we are destined to do untold good to the fair Province of Ontario.

I have to thank you kindly for the courteous hearing you have given me, and for the many kindnesses extended to me by all members of the Horticultural Societies of the Province.

R. B. WHYTE: You say you wish a sworn statement made of the returns before the end of July. Couldn't that be fixed so that it could be sworn to at the time of the annual meeting?

The SUPERINTENDENT: You would be in a better position to make your statement by the first of July.

Prof. H. L. HUTT: Mr. Wilson has referred to some of the old societies dropping out. There is room for a lot of work in organizing new ones. Many towns would have live societies if they only had someone to take the initiative. There should be some funds provided whereby we can employ an organizer. Last week I was down in the village of Stirling. They have a society that has been organized twelve years. They have stuck to it, and are doing splendid work. It is only a small town with hardly 1,000 inhabitants. They would have a representative here, but they have spent all their money in improving the park in the centre of the village.

LAYING OUT AND PLANTING OF SMALL GARDENS.

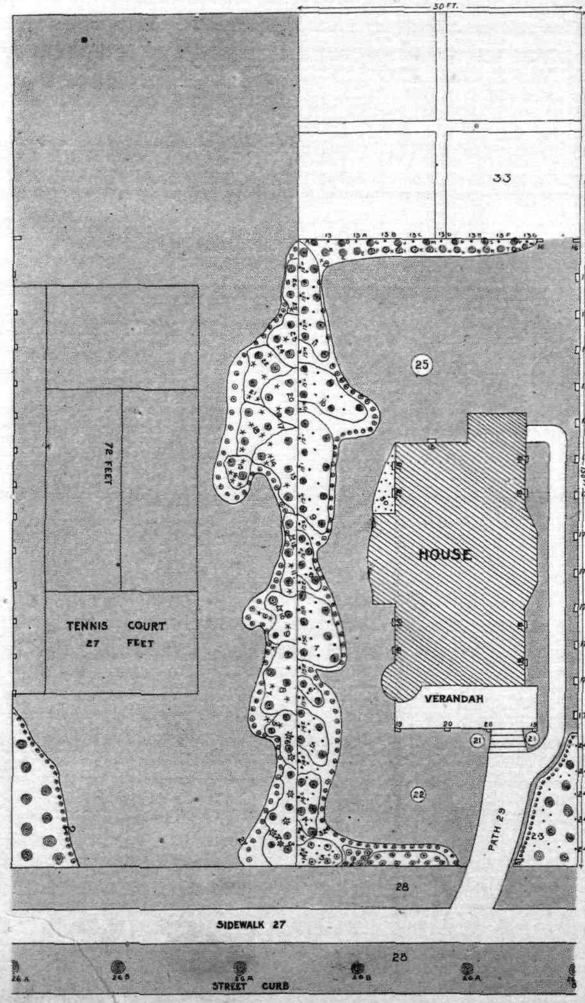
By RODERICK CAMERON, TORONTO.

I have prepared a double plan of a city or town lot, representing one hundred by one hundred and seventy-five feet. The lot is divided by a line running through the centre, so that if desired by the owner it can be turned at any time into two of fifty feet, and each planted so economically that it fits two purposes, first while it is the property of one person, he has the benefit of the whole, and if one of the lots becomes the property of some one else, the planting benefits both, besides being more attractive to the general public passing by. Another benefit is the extra value added by its being planted, making it more valuable and attractive to the purchaser than one unimproved.

I have planted one of these lots with dwarf evergreens because I have been asked by several persons to do so as they wished to plant with evergreens but did not know which were the hardiest and most suitable for the purpose, and filled in with perennials temporarily.

The second lot I have planted with shrubs and perennials to fill in and cover the ground until occupied by the shrubs altogether.

The numbers on the plans will show where each should be placed upon the lot.



Laying out a City Lot.

Again, if the second lot should be sold the provision is made that th house should be built where the tennis court is laid out; and this, throwing the houses further apart from one another and giving more lawn spac between them, helps to beautify the city.

The diagram is laid out to a scale of five feet to the inch.

No.

1. Daphne cneorum and Scilla campanulata.
2. Yucca filamentosa and Narcissus "Von Sion."
3. Pinus montana compacta and Lilium testaceum.
4. Picea excelsa gregoryana and Lilium tigrinum fl. pl.
5. Pinus strobus nanus and Hemerocallis Thunbergi.
6. Thuja occidentalis "Tom Thumb," and Funkia "Thos. Hogg."
7. Thuja orientalis and Larkspur in variety.
8. Picea excelsa pygmea and Yucca augustifolia.
9. Picea nigra Domitta and Pæonia officinalis.
10. Chamæcyparis obtusa and Hemerocallis Kwanso variegata fl. pl.
11. Juniperus virginica glauca and Phlox paniculata, "Bridesmaid."
12. A. Margaret Dickson.
    B. Alfred Colomb.
    C. Mrs. John Laing.
    D. Mrs. Sharman Crawford.
    E. Prince Camille de Rohan.
    F. Paul Neyron.
    G. General Jacqueminot.
    H. Soleil d'Or.
    I. Madam Plantier.
    J. Baroness Rothschild.
    K. Duke of Edinburgh.
    L. Fisher Holmes.
    M. Frau Karl Druschki.
    N. Salet Moss.
    O. Baby Rambler.
    P. La France.
    Q. Glory of Mosses.
    R. Anne de Diesbach.
    S. Victor Verdier.
    T. Baron de Bonstetten.
    U. John Hopper.
    V. Coquette des Blanches.
    W. Frau Karl Druschki.
    X. La France.
13. A. Crimson Rambler.
    B. Dorothy Perkins.
    C. Queen of the Prairie.
    D. Crimson Rambler.
    E. Dorothy Perkins.
    F. Queen of the Prairie.
    G. Crimson Rambler.
14. A. Clematis paniculata.
    B. Clematis Jackmani.
    C. Clematis paniculata.
    D. Clematis Jackmani.
    E. Clematis paniculata.
15. A. Celastrus scandens.
    B. Actinidia polygama.
    C. Hall's Honeysuckle.
    D. Clematis virginica.
    E. Belgian Honeysuckle.
    F. Celastrus scandens.
    G. Actinidia polygama.
    H. Hall's Honeysuckle.
    I. Clematis virginica.
    J. Belgian Honeysuckle.
    K. Celastrus scandens.
    L. Actinidia polygama.
    M. Hall's Honeysuckle.
    N. Clematis virginica.
    O. Belgian Honeysuckle.
    P. Celastrus scandens
16. Aristolochia sipho.
17. a, b, c, d, e, f, Worden grape vine for arbor; g, h, i, j, k, l, m, aristolochia sipho
18. Amphelopsis veitchi.
19. Aristolochia sipho.
20. Clematis paniculata and Jackmani planted together.
21. Vases filled with tender plants.
22. If clay soil, weeping English Beech or weeping Rivers Blood-leaved Beech. I good loam, then plant cut-leaved weeping Silver Birch, or the Maiden Hair Tree.
23. Thuja occidentalis globosa and Funkia undulata; Thuja occidentalis argente variegata.
24. A, B, C. D, E, Clematis paniculata.
25. Clothes green.

26. Street trees 20 feet apart; those marked "a" are nurse trees eventually to be cut out, leaving six 40 feet apart, the proper distance for street trees. European Basswood and Acer saccarina nigra are good.

27. Sidewalk.

28. Boulevard.

29. Path.

30. Tuberous begonias.

31. Festuca glauca (border).

32. Pachysandra terminalis, arabis albida fl. pl.; armeria vulgaris, either are good, choose one.

33. *Kitchen garden.*

THE SECOND LOT—FLOWERING SHRUBS.

No.

1. Deutzia gracilis Lemoinei and Spiræa "Anthony Waterer" alternately.
2. Phlox sublata.
3. Deutzia gracilis.
4. Phlox "Coquelicot."
5. Spiræa japonica (callosa).
6. Campanula persicafolia.
7. Viburnum japonicum plicatum.
8. Delphinium.
9. Campanula cactiflora.
10. Viburnum opulus aurea.
11. Weigelia rosea "Eva Rathke."
12. Coreopsis lanceolata.
13. Exochorda grandiflora.
14. Funkia lançeolata undulata aurea.
15. Berberis Thunbergi.
16. Potentilla fructicosa.
17. Weigelia floribunda Lavallei.
18. Monarda didyma.
19. Spiræa venusta.
20. Philadelphus aurea.
21. Spiræa Van Houttei.
22. *Physostegia virginiana alba.*
23. Physostegia virginiana.
24. Syringa vulgaris "Marie Legraye."
25. Syringa josickœ.
26. *Veronica longifolia subsessilis.*
27. Border of either Veronica rupestris, Poa trivalis variegata, or Aubretia Hendersoni.

I am quite alive to the fact that this plan will bear criticism, that it and its contents will not suit every situation and soil, but it can be modified to suit.

The soil should be deeply dug and well pulverized after receiving a heavy coat of manure, so that it may hold moisture throughout the season. It should be frequently stirred during dry weather, or a mulching of manure placed to cover the surface of the soil under the plants to keep them cool and damp. They should not be allowed to dry at the roots before being planted, particularly evergreens.

WINDOW BOXES, HANGING BASKETS, AND RUSTIC STANDS.

BY WM. HUNT, FLORIST, O.A.C., GUELPH.

There is no feature probably of floral decorative art that presents greater facilities for the display of intensive and artistic taste on the part of the flower lover, or that can be more universally made use of, than the making and arranging of window boxes, hanging baskets, and rustic stands, for the outside adornment and brightening up of the environment of the home in summer. This is especially true of homes in cities and towns, where for want of garden space, unsuitable conditions from surrounding buildings, and for other reasons, it is not possible to have the more elaborate and expensive features of floral adornment, such as flower beds, flowering shrubs, and other features of landscape art. The addition of a few window boxes, rustic stands, etc., will often transform an otherwise unattractive, unpretentious, or perhaps positively unsightly building or its surroundings, into a pretty, bright, pleasant and attractive spot. Not only is this true of residences and homes, but also of public buildings, offices, factories, and schools. Many of our public and civic buildings throughout the Province present a most deplorably bare and desolate appearance that could be changed—at least in the summer time—and the buildings made to look much more pleasing and inviting in appearance, by the addition of a few of the artistic features forming the subject of this paper, and thus help to brighten up whole blocks of perhaps otherwise bare and unattractive buildings. Many large factory owners have already taken the initiative in this respect by planting vines and climbers around their buildings, and putting boxes of plants in the windows of their factories, thus helping not only to give an air of brightness and prosperity to the surroundings, but also to cheer and brighten the sometimes monotonous character of the labor of the employees. It is pleasing to know that where this innovation has been tried it is considered to be a remunerative proposition from all points of view.

Around our schools, especially in cities and towns, where from the crowded surroundings there is seldom little room for flower beds and borders, and other decorative landscape features, a few window boxes or rustic stands would make more bright and attractive the surroundings of many of our scholastic institutions. The plants and flowers would also assist teachers materially by supplying natural subject matter for their botanical and nature study lessons, as well as helping to develop in the scholars a love for all that is beautiful in the floral world, and create an interest that would doubtless continue to increase and develop long after the scholar had left the precincts of the school. The same remarks will apply to the surroundings of many of our village and rural schools. It is a matter however of congratulation, that our horticultural societies have been the pioneers in this respect, and have done good work among our young people in endeavoring to interest and educate them in their taste and love for plants and flowers in various ways.

I need not enlarge, however, upon the desirability for the more universal use of the particular features that form the subject of this paper, but will endeavor to give a few ideas of how to attain the best results with these recognized and valuable adjuncts and accessories to floral decorative art, for the beautifying of homes and other surroundings mentioned.

How to Make Window Boxes. A window box does not necessarily require to be of an elaborate or expensive nature, so long as it is strong enough to stand the pressure of the weight of soil used, and resist the efforts of gales and winds to dislodge it from its position. A plain wooden box made of *one inch dressed pine of the following dimensions will be found* very useful, inexpensive, and effective.

Length of box (over all) should be about the width of the window itself, not including the window frames. The two or three inches width of frames on each side of the window will allow for covering the box with cork bark, or other material if required, of which more will be said later on. The dimensions given here can of course be changed to some extent so as to suit the style of window, but care must be taken not to have the box too large, so as to be heavy or unwieldly.

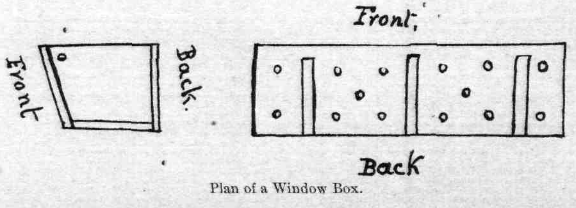
Width of box at top (inside measurement), 9 to 10 inches.

Width of box at bottom (inside measurement), 8 to 9 inches.

Depth of box (inside measurement), about 7 inches.

The difference in the width of the top and bottom of the box will allow the front to stand at an angle or slope outwards from the bottom up, thus avoiding the common box-like appearance which a perfectly upright front board would have. This method also allows the drooping varieties of plants to hang clear, thus adding to the effect, as well as being beneficial to the plants. The bottom of the box underneath should have three or four thin cleats of wood one inch in width and half an inch in thickness nailed to the outside of bottom to allow of free drainage, and prevent the rotting of wooden sills. Some half-inch holes should be bored about six inches apart in the bottom for drainage purposes. It should be painted outside, and two inches down from top on inside. A dark, dull, olive-green color is best for this purpose. A small iron staple or screw-eye should be placed on each end near the front top corner to support it when placed in position. A piece of strong wire, or an iron hook fastened to the screw-eyes or staples placed in the window frames should be used for this purpose. The box should have at least three inches bearing on whole length of window sill. A piece of galvanized sheet iron may be placed on sill to prevent it from rotting.

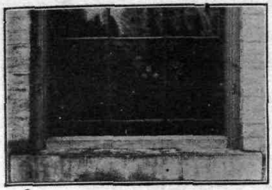
The following diagrams will perhaps be of service in the construction of the box:



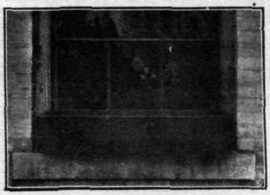
Plan of a Window Box.

A box constructed as stated will with ordinary care last for nine or ten years if given an occasional coat of paint.

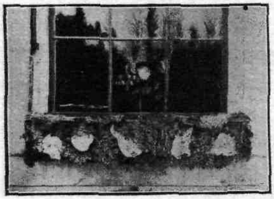
A more elaborately constructed one can be had by having the bottom project about an inch on the front and ends, and the edges nicely rounded. Beading can also be used effectively for appearance sake. All of these, however, are of little real use, and only serve to help rot the box. It is much better for the successful growth of the plants to have a plain box as des-



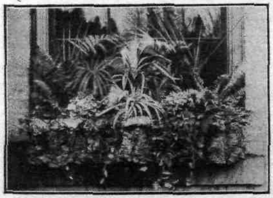
Plain Window.



Plain Painted Box.



Box Covered with Native Bark, Lichen and Fungi.



Box Filled for Shaded Position.

Box Filled with *Plants for More* Sunny Position.

Rustic Stand, Bottom Part of Apple Barrel, 15 Inches Deep, Covered *With Native Bark, etc.*

cribed, covered with virgin bark, or even the bark of some of our native trees, which should be nailed on firmly. Flat pieces of bark are best for covering window boxes. It may be necessary to run a saw cut partially through the cork bark lengthwise on the inside, to make it more pliable, and set closer. The bark of the hard maple, ash, and walnut, are particularly well suited for this purpose, especially if taken from a recently felled tree, when the bark is pliable and easily placed in position. The covering of bark—or bark and moss—as seen in the illustrations, not only gives the box an artistic and rustic looking appearance, but also helps to prevent the soil from drying out as quickly as it does in a plain wooden one, a point worthy of consideration, especially if it is placed in an exposed, sunny situation. Covering the outside with small pieces of split cedar nailed on has a good effect from an artistic point of view, as well as preventing the soil from drying out too rapidly. These are some of the methods by which window boxes can be made more artistic and less crude looking than we often see them, and also give the plants the best possible conditions for successful growth.

Soil for Window Boxes. A good rich, loamy compost, about two parts loamy potting soil and one part of well rotted barnyard manure with a little bone meal, makes a good soil for window box plants generally. It is of no use expecting good results in window boxes if poor soil is used in them. I have found it a good plan to put a sprinkling of bone meal or a thin one-inch layer of well-rotted barnyard manure spread over the soil about an inch from the bottom. This serves as a reserve fertilizer when the balance of the soil has become exhausted.

When to Fill Window Boxes. Window boxes should not be filled until it is about time to place them in position. In fact, I prefer filling them after they are placed in position if possible. Boxes fiilled a few weeks before they are placed in position may look better at the time, but long before the season is over they begin to look shabby from the soil having become exhausted and filled with roots, a condition it is difficult to remedy even with the application of fertilizers, or with copious applications of water. Well grown and well hardened plants of a good size and appearance, and the box filled at the time of placing in position, will give far more satisfactory results for the season than one filled earlier that soon gets past its best, even if the changed condition from indoors to outdoors does not at once have a disastrous effect, as it often does on the plants unless shaded for a few days, or placed in a well sheltered position from sun and wind. Good rich soil, and large, well grown, and hardened plants are essentially necessary to have a successful window box. About the first week in June is a good time to place them in position.

How to Fill and Arrange Plants. No other drainage is necessary beyond the holes in the bottom of the box. Put in soil sufficient to fill box about one-third. Place the plants—after they have been knocked out of the pots they are in—in the position they are to occupy, and make sure that you have them in their proper locations before filling in any more soil. Put the tall plants at the back and the drooping and trailing one in front and ends of the box. Then fill in any open and bare looking spots between with medium height plants. In placing these in position, due consideration must be given to height and habit of plants, as well as color effect, and to have them arranged so that height, density, and color may be preperly balanced and harmonized, without their presenting a stiff, formal appearance. The surface soil of the ball of earth on the plants when placed in the box should

be about an inch or more below the top edge of the box. When satisfied that the plants are properly set and arranged, fill in the soil and pack it moderately firm around the roots, filling in to within an inch of the top. Give water at once, sufficient to moisten all the soil. Avoid over watering afterwards for a few days at the roots until plants are established in their new quarters. Sprinkling water overhead, and shading the plants for a day or two will be beneficial, when first planted. When growth has well commenced. water should be given freely every day except in very wet weather. Water till it runs out through the holes in the bottom of the box every time the plants are watered. Toward the end of the season some liquid fertilizer may be given the plants. An application of fertilizer as used for pot plants once a week from middle of July until the end of the season will be beneficial, or a top dressing of rich soil may be applied about the end of July to advantage. In the autumn many of the plants can be taken out, potted, and placed in the window for winter. It is seldom that the box is of any use for indoor decorative purposes without being refilled. Boxes filled with ferns, bulbs, or plants in the fall, look very nice, however, in a window in winter.

BEST POSITION FOR BOX. Any aspect rather than a directly south one is best. If the windows face the south, the boxes should be shaded by an awning for a few hours in the hottest part of the day. In a window facing the south, and fully exposed to the direct and concentrated heat of the sun against the building the greater part of the day, it is impossible to have complete success with a window box, even if filled with the hardiest sun-resisting decorative plants.

POT PLANTS IN SUMMER. Plant lovers, especially in cities and towns, are often at a loss to know what best to do with house and window plants in summer, having no space out of doors perhaps, to stand the plants in the shade for a change and rest, as is customary with those who have facilities for resting plants during the summer in shaded positions out of doors. By placing the box outside of an east, north or west window, with the pots in the box, arranging the plants properly for effect, and packing moss around them, almost all house and window plants can be very much improved in appearance, with but little care and attention. The moss prevents a too rapid evaporation and keeps the roots of the plants cool and moist. Common moss from the bush, or Sphagnum moss can be used for this purpose. This is a much better plan than placing the pots on window sills and exposed verandahs where the sun and wind compel constant and copious waterings, the plants often-times suffering badly even when attended to regularly, in the matter of watering.

VERANDAH BOXES. These are made similar to window boxes, differing possibly in shape slightly, so as to suit the requirements of the position they are to occupy. If used on floor of verandah, it is well to set the boxes in large trays or pans made of galvanized iron to prevent rotting of the floor as well as for cleanliness.

HANGING BASKETS. The ordinary earthernware hanging basket should have the bottom constructed so as to form a saucer, in order to avoid the troublesome, unpleasant, and dangerous operation of either lifting the basket down, or of flooding and damaging the floor of the verandah every time they are watered. Several potteries have adopted the style mentioned, of having a saucer as a part of the basket; but in most specimens that I have seen, the saucer is rather too narrow and shallow to be of the best possible use. The holes through the bottom of the basket into the saucer

placed there for drainage purposes, are also often too small and too few in number to fully serve the purpose for which they are intended. For a lawn and exposed positions, I prefer hanging baskets made of wire. As a rule, the ordinary wire baskets sold are not made large enough to be serviceable. These should be lined at time of filling with thick wads of moss placed around the basket with the green side outward. The soil and plants can then be filled in the same as when using an earthenware basket. Plants succeed better in wire baskets than in earthenware ones, and these should be more used than they are, if only for this reason.

RUSTIC STANDS. These are possibly some of the most effective and easily obtained features of lawn decoration. A rustic stand can be made up of the crudest and commonest materials, if a little artistic and original taste is made use of in connection with their make up. A tub, part of a barrel, or a box of suitable strength and size can be transformed into a really pretty and effective rustic adornment with a few pieces of common lichen or moss-covered pieces of bark from our native trees nailed around them; or they can be covered with cork bark, if something more uncommon and elaborate is required. Small pieces of cedar saplings split in two with the tops pointed so as to represent a rustic picket fence and nailed on the tubs also make a pleasing and effective stand. One of these rustic tubs or boxes placed on a piece of round timber of pine, or any native tree, with the bark left on so as to look as natural as possible, will make a very effective and pleasing object placed around the lawn or grass plot, when filled with flowering and trailing plants. The piece of timber used should be sunk into the ground a little, if not large enough to stand firmly of itself. The box or tub also would be better if fastened down to stand with a piece of wire in two or three places to prevent it being blown or pushed over. Fossil stones, or large stones of any kind, can be used very effectively as stands for the above purpose. An old hollow trunk or pollard of a basswood or other tree, about two feet six inches in height, also makes an effective rustic adornment when filled with good soil and plants. One of these last named filled with scarlet salvia and trailing plants makes a most conspicuous and pleasing object on the lawn in the summer time. Rustic stands can be purchased at most of our large seed stores, in several designs. The ordinary wire stands are not very ornamental, and not suited for the pot plants out of doors, especially in an exposed sunny position, as the plants dry out too rapidly in them. If these stands were constructed so that moss could be packed around the pots, they would at least have the merit of being useful, if not ornamental.

PLANTS FOR FILLING WINDOW BOXES, ETC. The main point to be considered in selecting plants for any of the before mentioned purposes is their suitability for the position they are to occupy as regards a sunny or shaded position, whether for a window box, hanging basket, or rustic stand. As a rule, plants that do well in a sunny position will succeed to some extent in a shaded position, with poorer flowering results possibly. Plants suited particularly for a shaded position will not, however, succeed well in a burning sunny position, even with the best possible care and culture. This fact should be borne in mind when getting a box filled by a florist or in selecting plants to fill the box or stand yourself, as it is one of the main points leading to success or failure. Tell the florist whether the plants are for a sunny or shaded position when getting the box filled. The tall growing plants are best suited for the back row of the box, the low growing, and those of a trailing habit for the front and ends, and intermediate sized plants for filling in between the back and front row if necessary. In filling rustic stands and hanging baskets place the taller growing plants in the centre.

Another point in the selection of plants is not only to have good sized ones, but to have plenty of them, so as to furnish the box well at once, planting so that there are no bare looking spots when finished. To have a bright and pleasing-looking effect, also select chiefly bright light-colored foliage plants, as well as a preponderance of the lighter shades and colors of flowering plants. A good admixture of white, pink, blue, and yellow should be used to brighten up and relieve the ground work of dark green foliage and heavier shades of scarlet flowers so often seen in window boxes. Brightness is one of the main points to be considered in the effectiveness of window baskets and rustic stands.

The following list of plants includes most of the varieties that can be effectively used for sunny or shaded positions:—

TALL PLANTS FOR SUNNY AND SLIGHTLY SHADED POSITION. Dwarf Lantana, Cannas, Coleus, Salvia, Irisene, Geraniums, Ivy Leaved Geranium.

LOW GROWING AND TRAILING PLANTS. Vinca Japonica, Vinca minor (Periwinkle), Nasturtium, Othonna Crassifolia, Annual and Periennial Sweet Alyssum, Dwarf Ageratum, Nepeta or Glechoma Variegata (Creeping Charlie), Centaurea Gymnocarpa (Dusty Miller), Mesembryanthemum Roseum, Petunia, Verbena, Madame Saleroi and other fancy geraniums, Gnaphalium Lanatum, Gazania Splendens, Perennial Tropaeolums.

FOR VERY SUNNY POSITIONS. Cacti, Echeveria, Agaves, Sansevieria zeylanica, Aloes, and other succulent plants can often be made use of.

TALL PLANTS FOR SHADED POSITIONS. Palms, Dracenas (Cordolines), Cyperus (Umbrella Plant), Fuchsias, Begonias, Aspidistras, Araucaria (Norfolk Island Pine), Ficus elastica (Rubber Plant), Asparagus plumosus, Pandanus Veitchii, Pandanus utilis, Crotons.

Sweet Peas, Convolvulus (Morning Glory), Tropæolums, Cobea scandens, and Climbing Nasturtiums can also be used very effectively in some positions as a background, as well as forming a shade for the window.

LOW GROWING AND TRAILING PLANTS FOR SHADED POSITION. Lobelia, Cuphea (Cigar Plant), Nasturtium, Tropæolum canariensis, Tradescantia (Wandering Jew), Senecio or German Ivy, Lophospermum scandens, Campanula isolepsis, Convolvulus minor, Farfugium (Leopard Plant), Anthericum variegatum, Asparagus Sprengeri, Festuca glauca, Scirpus riparius.

Many of the plants mentioned, such as Salvia, Ageratum, Petunia, Verbena, Centaurea, Cobea scandens, Lobelia and Tropæolum can be grown from seed. Sow the seed indoors about the end of March or early in April and grow on indoors until the end of May or early June. Sow Nasturtium, Cobea scandens, and Tropæolum seeds, two or three seeds in a small pot, as they do not transplant very well. There is probably no one kind of plant better suited for window boxes than both the dwarf and tall nasturtiums. They are indispensable for this class of plant decorative work. Seeds of these last named sown in the window box about the end of May will of themselves make a pleasing effect, but are later in flowering.

In concluding this lengthy paper, I feel it would not be out of place to mention that the different home decorative subjects mentioned, and similar artistic and rustic features of landscape art, are features that we are deplorably deficient in around our city and rural homes. Those who have travelled in the older lands can testify to the bright, pleasing and restful appearance the rustic and floral adornments in the shape of summer arbors, pergolas, arches, etc., have, in adding to the charm and attractiveness of the lawns and flower gardens of the old land. It is pleasing to see, however, that our people

are rapidly taking up and adopting these and similar features of decorative art for making our Canadian homes bright and attractive, features that not only help to make an ideal home in the truest sense of the word, but that will also assist materially in promoting the happiness and contentment of our people, as well as assisting in developing the best type of citizens throughout our country.

R. B. WHYTE: When I was in the City of London last summer, I was very much struck to see the great use they made of window boxes. In such business places as Holborn, you would hardly see a home that had not a window box. They use these things to an extent that we have no conception of here, and the result is a wonderful freshness and beauty of the streets, and that is largely why London is the most attractive city in the world. I was impressed with the beauty and simplicity of the window boxes.

J. S. PEARCE: It would be in the interests of Horticultural Societies if the report could be got out in time so that the members of the Societies throughout the Province would get the benefit of that paper next summer. If that is not possible, I think the Horticultural Societies should take that up and have it printed. I also want to refer to Mr. Cameron's very admirable plan for a town lot. It is just my idea of what it should be. Speaking of the straight lines, that is something you cannot impress too much upon gardeners. We are too much imbued with straight lines. In the City of London, sidewalks and houses are all in straight lines with the exception of a few, and you have no idea what an improvement it makes to have a walk swing one way or another. If Mr. Cameron will take the trouble to give us the plan for the single lot, forty or fifty feet frontage, it would add very much to the interest that would be taken in his address.

R. CAMERON: The division is in the centre, and it represents a lot fifty by one hundred and fifty. The whole plan represents two lots.

THE PRESERVATION OF SUMMER FLOWERING BULBS AND TUBEROUS PLANTS.

BY J. MCPHERSON ROSS.

In order to cultivate any plant successfully the grower should know something of the climate of the country of which the plant is a native, its summer and winter temperature and the rainy season; with this knowledge the grower complying with the conditions necessary, can hope to successfully cultivate whatever plant he desires. It is the knowledge of keeping plants in a condition of rest by cold storage that enables the florist to have flowers of any plants at whatever season of the year he may chose to have them in bloom, as for instance lilacs in every month of the year, as well as the lily of the valley; by using natural laws to suit himself, he produces the seemingly impossible, and converts summer into winter and brings the breath of May blossoms and the June fragrance into frosty December and ice cold January. The cultivation and care of the subjects of my paper is so generally known, that at a first glance or thought it seemed almost unnecessary to say anything about it, being analogous to the old saying of "carrying coals to Newcastle," but I have lived long enough to know that there is always something to be learned, —some practice different to others—and we also know that the chief value of a paper is not for what it describes as for the new ideas it suggests, and the discussion of the subjects spoken about often brings forth some valuable facts not generally known.

As I remarked before it is a good plan to study the climate of the country from which any plant comes. Thus the dahlia came originally from Mexico, growing in sandy meadows five thousand feet above the sea, a tropical climate with hot summers and rainy winters. The Canna comes from India and the Gladioli from the Cape of Good Hope, also the home of the Tritoma, Ixias, etc. This fact was well impressed on me in my two years' sojourn in the south engaged in a southern nursery. Fresh from the experience of our northern climate, and the care to protect from frost and the growing of stock through the winter under glass, it was novel to find the Verbena growing outdoors all winter, the Ageratum a wayside weed, and the Lantana a hardy shrub. Still in our rigorous climate so little labor is required to house and winter any bulbs and tubers that need such care that it may be summed up in one line: "When the tops are killed with frost dig up and store in a dry frost-proof cellar." The advice given to winter successfully bulbs and tubers may be applied also to our garden favorites as Caladium, Esculentum, Oleanders, Fuchsias, and such like, Yuccas, Axapanthus and Water lilies.

In a general way our nursery and seed catalogues speak about winter preservation but not enough. Perhaps they are afraid that if they were to dwell at any length on such a subject they would frighten customers and deter them from buying. As most residences built are heated with furnaces or hot water, there is little danger from frost; but where cellars are so heated the only danger would be from over dryness, and it would be safer to store all bulbs and tubers in boxes filled with sand or sawdust or else dig the roots up leaving the soil on them and place in boxes, looking over occasionally in winter and watering when too dry. The four extremes to be avoided are heat, cold, moisture and drought. A proper medium being observed in these extremes very little work is required to winter anything.

The bulbs or corms of the Gladiolus are easily preserved during winter. After the first frosts in October they may be dug up at any time in the month, cutting the stalks off close to the bulb and storing them on shelves or trays in any cool cellar or convenient place that is free from frost. This holds good for all other bulbs and tubers. Having piled them loosely in trays to a depth of not more than four or five inches they may remain till it is convenient to clean and sort them, that is to remove the cormels or bulblets and the old bulbs, sorting the young strong ones back into the trays, properly labeled so as to have them ready for spring planting. It is recommended to keep the bulblets dry for the year without planting as they will do better than if you plant them. When you have only a few bulbs cut the stalks about six inches long, tie them into a bunch and hang on nails in the potting shed like onions.

After the frost has nipped the foliage of Dahlias cut the stalks off within six or eight inches of the crown of the tubers and dig them up. I usually leave them on top of the ground if the weather is not too severe, for a day or two to harden and dry up. Then remove them into the cellar or greenhouse. The best advice to amateurs about keeping Dahlias tubers is, "Wherever potatoes will kept safe so will the Dahlia." The proper temperature is about 50 degrees; higher temperature is apt to start growth, though a little of that will not matter. Where you have a good many you may store them in heaps of two or three deep with the soil all shaken off. Keep them dry. Where you only have a few tubers a good plan is to pack them in the sand. Towards spring overhaul them and divide into suitable size for planting.

The next important summer-flowering plant is the Canna. This being a native of India, is a tropical plant and requires more care than the Gladiolus or Dahlia, and if kept at a lower temperature than 40 or 50 degrees they are

apt to rot, particularly if too damp. If kept too warm they are apt to grow like the Dahlia, though a little growth will not hurt them. Still they are better dormant. They should be stored in the warmest corner of the cellar out of draughts, leaving the soil on the clumps as they come in, or they may be kept covered with sawdust in boxes a couple of feet from the ground, as the dampness and coolness of the soil is apt to rot them. It is a good practice after the frost has cut down the foliage to leave them for a week in the ground to ripen the tubers. Some of the more valued sorts should be potted and kept in the semi-growing state all winter. You can hardly keep them too warm, and there is no difficulty in keeping them safe in the ordinary greenhouse. Towards March they may be divided and potted or placed on benches to start into growth to have them fairly well advanced for outdoor planting about June 1st. Some of the growers have convenient bins for them under the benches, shaking all the soil off them and piling them two or three feet deep. An occasional turning over arrests the growth and keeps you in touch with the condition of the plants.

Tuberous Begonias are coming into general cultivation and are such showy free-flowering plants that I expect to see a more general and increasing use made of them in our flower gardens. For several seasons past I have cultivated a bed of them. Though commonly supposed to flourish only in partially shaded spots, I have seen some fine beds of them fully exposed to the sun and they thrive finely and give great satisfaction when they have light rich spongy soil and are kept well watered. When frost comes, remove them into boxes and let the soil and tubers dry together, keep them at a temperature of 50 degrees and pot early in spring for planting outdoors. I have planted the tubers right out in the garden but this throws them a little too late for the free-flowering season that summer and this is altogether too short as it is. There are a few more plants that I might mention, bulbous and herbaceous, but such advice as is -iven for Cannas or Dahlias will apply to the rest. Lilies and all the members of the lily tribe in the borders should receive a bountiful mulch of leaves or strong manure to preserve from too severe freezing; also keep the bed well rounded up to insure free drainage. You cannot have a flower border too dry. When manure, or leaves or other litter cannot be had conveniently, a top dressing of soil three or four inches deep dug from the side of the bed and spread evenly over the tops of plants is beneficial, preventing upheaval in stiff soils from frost, and does good all round. It has been truly said that a gardener's work is always six months ahead of him. He sows in spring to have plants in the fall. He preserves his bulbs, tubers and plants in the fall in boxes or bags or on shelves in cellars through the winter to have flowers next summer. Care saves thousands of plants, while neglect destroys millions. From the nature of his occupation the gardener imperceptibly acquires knowledge from constant observation and experience, and, being generally alone in his work, his mental faculties are constantly at work analyzing the causes and deducing reasons for this result and that. No occupation is more refining or edifying, for with his eye constantly on her operations and his head close to her breast Nature whispers many delightful secrets to his ear alone.

H. H. Groff: Mr. Ross advised that a corm be kept over for one season. The question of germination of a corm is a peculiarly important one, and of great interest to those who desire to multiply certain valuable features. In fact, if they do not carry these peculiar characteristisc very often very valuable varieties are lost owing to the non-fertility of the corm to germinate successfully. Our practice is to plant all the corms every year, and we find that some of them invariably grow, and some seasons a large

majority of them grow. We have a very valuable type that received a certificate at Washington a few years ago, but its multiplication is rather erratic, some seasons better than others. We plant corms each year and take up the soil, corms and all, and separate them by screens, returning them again to the soil the following year. I think they do better in the open ground.

We are dealing with a semi-tropical plant; it is from home, and our difficulties in Canada which are supposed to be slightly more acute, are not the only ones in the world. I have discussed the matter with Lemoine, the originator of probably the most beautiful strain of Gladiolus, and he says: "They do not come up; some seasons they do quite freely. I think it is due to the climatic condition of the preceding seasons."

R. B. WHYTE: There is an impression abroad that there is danger in keeping them over. Some four years ago I gave away two quarts; and they were kept a year, and they certainly seemed to me to grow with greater vigor and made larger bulbs in the given time than the other ones. I know he sold 10,000 at the end of the second year of very fine bulbs. I never had that success myself.

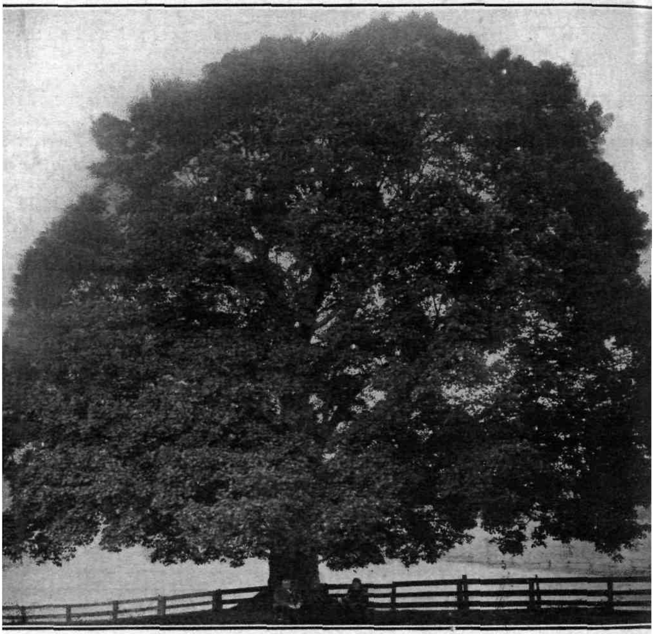
H. H. GROFF: Everything that comes out of the ground goes into it next year, and we take no more chances than we can help. There are no two seasons alike. We know we are dealing with a semi-tropical plant, and of course a great deal of influence that is latent in that plant is handed to us through the method of transference by hybridization, and it is almost impossible for us to tell what character that plant inherits. It is up to us to do our part to plant and cultivate it, and take chances. We do not get time to think of carrying anything over, because if we did it would be a lost season. If we can get them into the market and get returns for them, so much the better.

The PRESIDENT: We all recognize that Mr. Groff is a prince of hybridization in this Province. We see his name all over the world almost. I succeeded in raising 300 bulbs from corms. The predominating type of flower is nearly all the same dark red, very rich, and I would like Mr. Groff to tell me how it is that when both these corms were taken from different colors they seemed to have reverted to one type.

H. H. GROFF: It is not a question of reversion, but of pure productive vitality. If there are any vital corms in your possession, some have a higher standard of vitality than others, and they ultimately will grow, when the others have been destroyed by natural conditions, or by crowding out by the dominating type, and the reason that your red predominated is because it carries greater vitality and out-lives the others. You understand you are dealing entirely with hybrids. They are made up of certain chemical constituents of which we know little, and it is difficult for us to say what season will come that will destroy these to such an extent that you may ultimately lose those you value the highest. The tendency is downwards and it is a case of the survival of the strongest.

B. LOTT: When Mr. Groff speaks of planting everything in the next season, does it mean everything, or only something very choice or good? I planted a new variety, said to be perfectly white. They came to me in a small shape possessing, apparently, but little vitality, and this fall when I came to look for the small bulbs I could not find them. Can any explanation be given of that? They were said to be a very choice variety of very great value.

H. H. GROFF: Probably they were greenhouse plants, and would not grow. We only keep those worth planting—those that we desire to perpetuate. We screen all from the smallest up and plant without regard to size.



UNDER THE MAPLE'S SHADE.

The trunk of this magnificent specimen is 15 feet in circumference, and its spreading branches extend over 75 feet. It was grown on the farm of London's energetic Parks' Superintendent, the late Mr. J. S. Pearce, and is upwards of 100 years old.

Woodman, spare that tree!
Touch not a single bough;
In youth it sheltered me,
And I'll protect it now.
'Twas my forefather's hand
That placed it near his cot;
There, woodman, let it stand,
Thy axe shall harm it not.

That old familiar tree,
Whose glory and renown
Are spread o'er land and sea;
And wouldst thou hack it down?
Woodman, I conjure thee,
Cut not its earthbound ties;
Oh, spare that aged tree
Now towering to the skies.

When but an idle boy,
I sought its grateful shade;
In all their gushing joy,
Here, too, my sisters played.
My mother kissed me here;
My father pressed my hand;
Forgive this foolish tear,—
But let that old tree stand.

My heartstrings round thee cling
Close as thy bark, old friend!
Here shall the wild-bird sing,
And still thy branches bend.
Old tree, the storm still brave,
And, woodman, leave the spot!
While I've a hand to save,
Thy axe shall harm it not.

FIRST DAY—EVENING SESSION.

The PRESIDENT: It is my pleasant task this evening to introduce, and this Association has the very great honor of having present our new Minister of Agriculture, The Honorable James S. Duff, who has only within a few weeks been called into the King's Cabinet Council of this Province of Ontario. We welcome him here most heartily. We had the very hearty sympathy and kindly co-operation of his predecessor, the Hon. Nelson Monteith. He has been succeeded by a gentleman who began his career on a village green in the County of Simcoe. We look forward with the greatest pleasure and anticipation to the success of the Department under his administration.

ADDRESS.

BY HON. JAMES S. DUFF, MINISTER OF AGRICULTURE, TORONTO.

I thank you, very sincerely, for the honor conferred on me in asking me to preside over your deliberations upon this occasion, and also for your kindly reference to myself; also for the very kind words that have fallen from your lips of appreciation of the work and efforts of my predecessor, the Hon. Mr. Monteith. It has been a very great pleasure to me, since I have been asked to take upon myself the responsibility of the position of Minister of Agriculture, to find that wherever I go kindly words are said of my predecessor. I was very closely associated with Mr. Monteith from the time he became a member of the House, in fact, he came in very nearly at the same time that I did. I feel that if I can measure up to the position that Mr. Monteith held in the estimation of the people engaged in agricultural pursuits, then I shall have done fairly well.

The President has referred to the fact that I came from the farm, and that is true, in the ordinary sense of the word. I know pretty well every phase of farm life, and the more I move amongst men. and the more I see of life, the more thoroughly I am convinced that after all there is no life that gives the independence, and such great opportunities for men to become public-spirited, broad-minded and useful citizens as the field of agriculture. The vocation of farming tends to breadth of mind. The man who is behind the counter or in the office following either commercial or professional life has not the opportunity to think of other things like the man who is engaged in agriculture. It is said that some of our greatest men have composed some of their best literature when following the plow. That was very true of Scotland's poet, Robert Burns.

I notice that the first item on the programme is the chairman's speech. I am not in a position to deliver an extended address. I appreciate very much the honor it was to me last night to have taken part in the opening of your splendid Horticultural Exhibition in the St. Lawrence Arena. The show itself was a credit to you. The collections of fruit, flowers and vegetables were such as to send a thrill of pride through every Canadian, particularly every citizen of Ontario, whether he is connected closely with horticulture, or agriculture, or is a plain professional city man. I am pleased to have this opportunity of getting in touch with your splendid organization, composed, as it is, of ladies and gentlemen from every part of this Province, and imbued, as I believe you are, with the Spirit of Civic Improvement. The discussions which will take place in connection with your annual gathering and that of the Vegetable and Fruit Growers will be read throughout the country, and will certainly bring forth good results.

I would not attempt to dilate upon the usefulness of this organization, but would say that the one great object that you as horticulturists have in view, viz., the diffusion of knowledge that will bring about a brightening of the homes of this fair Province, that will lead to a better knowledge of plants, and flowers, and trees, and shrubs, cannot fail to have good effect. In travelling through the country, you pass a farm on which the people have been for many years, and yet you do not see an ornamental tree, not even our own maple, of which we are so proud. You begin to wonder what sort of spirit pervades the owner thereof. Compare that with another farm that you may see, and you will find up the lane and possibly back through the farm, maples and elms, and closer around the home are beautiful evergreens, the cedar, the balsam and the spruce, and on the veranda, in the summer, a lot of beautiful flowers. Then you come to the conclusion that there is more in that home than just the work of the farm. There is something more thought of than plowing, sowing and reaping and gathering in of the fruits, because all these things of which I have spoken tend to higher ideals, and to higher thoughts, and for that reason I feel that there is no organization to-day that has a greater future before it, looking to the welfare of the people of this Province, than the organization which you represent here to-night.

As far as I am personally concerned, so long as I am privileged to occupy the position which I now have the honor to occupy, it will be my earnest endeavor to help this Society along in every possible way. Not because you are horticulturists, not because you are holding your annual meeting here, but because of the fact that your work cannot help but permeate the great agricultural masses of our country, and of our urban population, in the way of bringing them to think of beautifying their homes, and making these homes a thing of beauty and a joy forever.

Moving and mixing as I have in public affairs, being associated as I was for many years in municipal matters, I have been a fairly close observer of our people, especially the farmers; and I have frequently found a love of beauty and of home surroundings in the hearts of most people. The making of homes beautiful may not have resulted in an accumulation of dollars and cents, but it did more than that, and that which is far better, it brought about a breadth of thought which could not be found under other *conditions*.

I am glad to be with you, and I shall endeavor this evening not only to carry out the programme which has been placed in my hands, but I shall endeavor to take in, very carefully, the thoughts and ideas that fall from the ladies and gentlemen who will participate in the discussions this evening, and I trust will go away very much improved from having been privileged to be with you.

A FRATERNAL LETTER.

By J. Horace McFarland, Pittsburg, Pa.

J. Lockie Wilson: I received this letter this evening; it comes from Mr. J. Horace McFarland, President of the American Civic Association, and with your permission, I will read it:

Mr. J. Lockie Wilson,
Superintendent of Agricultural and Horticultural Societies,
Parliament Buildings, Toronto, Canada.

Dear Sir,—I am in receipt this morning of yours of November 6, advising me of the meetings on to-morrow and Wednesday in the City Hall of the Third Annual Convention of the Ontario Horticultural Association.

Roses.

I heartily wish I might be able to take train to-day and be with you to-morrow, for I have the pleasantest possible recollections of my meeting certain of the active men in a number of your horticultural associations. I am, however, leaving for an address in a neighboring city, and am deep in the preparation for the important annual meeting of the American Civic Association, which begins in Pittsburgh next week, and to which I heartily wish the Ontario Horticultural Association might see fit to send one or more fraternal delegates.

The Province of Ontario is unique in its provision of a certain basic support for the conduct of the important associations which you superintend. That under recent enactments these associations are permitted, and, indeed, encouraged to take an interest in civic affairs, is another item of advantage to you in Ontario, which I trust you duly realize. No such advantage exists in any state in the American union.

My experience in five cities in Ontario early this year convinces me of several things: First, the greatness of the opportunity before Canadian cities; and, second, the high character and earnest purpose of those serving the public through the medium of the horticultural associations.

The opportunity is yours of profiting by the all-too-many errors of the cities in the States which have gone ahead in development regardless of true civic advance, and of the individual efficiency of the citizen. Now, in a rapidly increasing ratio, these American cities are realizing their errors, and are extensively paying the high price of hindsight, having long ago foolishly disregarded the economy of foresight.

*I conceive that the highest function of a municipality is to provide for the happi-*ness and the efficiency of its citizens. The unhappy citizen is not efficient, and the inefficient citizen is a tax on others. Thus the answer to the question of Cain, "Am I my brother's keeper?" is constantly and affirmatively made in connection with the highest economic interests of a community as well as of an individual.

Under your wise supervision and in connection with the high public spirit I know exists, the cities of Ontario should become the model cities of the American continent. They have the opportunity to control the city plan, so that it may be a wise one in each community, tending toward a sane and wholesome development, and with sufficient open spaces to provide the minimum of an acre for every hundred inhabitants of publicly owned and publicly used recreation spaces. The opportunity exists to greatly improve conditions as to city paving, sidewalks, trees, poles, wires, and the like, using the dreadful examples to be seen across your southern border as things to avoid. You have the opportunity to educate your own people in the duties and advantages of good citizenship. You have a smiling climate and a flora which can be made available to all the people through the wise extension of public grounds, parks and flower gardens. *I may commend to you most heartily the sentiment of a gifted* vice-president of the American Civic Association that we are to work for "beauty that supplies a daily need and not a Sunday pride." I may also urge upon free and prosperous Ontario the insistence of that great Englishman, William Morris, that there should be "beauty for the few no more than freedom or education for the few."

So I send you on behalf of the American Civic Association this greeting, full of hopefulness for the future of the Province of Ontario and the Dominion of Canada. I can see no visible international line in improvement matters. I cannot realize the existence of any arbitrary governmental division between those of equivalent tongue, race and aims who want the best for their communities, regardless of politics, personalities or geographical positions. I could wish that there was a strong Canadian civic association, if there was any importance in a division, but inasmuch as Canada is as much America as is the United States, I would be glad if whatever facilities the American Civic Association possesses for aggressive advance work toward better living conditions might be fully availed of by Canadian communities. To this end I propose membership in the American Civic Association, to the various constituent horticultural societies making up the Ontario Horticultural Association, on exactly the same basis as boards of trade, chambers of commerce, civic clubs, improvement associations, and the like become affiliated members of the American Civic Association in the United States. Access to our fifteen departments for definite advice, the constant receipt of our definite and accurate improvement literature treating of the details, for instance, *of the smoke nuisance, the billboard nuisance, the abolition of poles and wires, children's* gardens, city planning and the like cannot but be of benefit to all citizens of the American continent, regardless of any geographical lines.

This membership is open to Ontario associations on exactly equivalent terms, as I have said. The cost is but $5 per annum.

In addition to this I propose to you for consideration by the Ontario Horticultural Association the formation of a Canadian Committee, specific official rank for which is being provided for in certain constitutional changes in the American Civic Association, to be brought about at our meeting next week. If the Ontario Horticultural Association sees fit to name three of its members to serve on this Canadian Committee, which

will consist of probably five or seven members, I should be glad to be so notified, and to report that encouraging fact at our meeting next week.

I also again urge the sending of a delegation to Pittsburgh, where the American Civic Association and the National Municipal League will meet in conference and co-ordination under circumstances of extraordinary interest. There will be presented by those responsible for it details concerning the great conservation movement which is of such vast importance to the American continent to-day. There will also be presented for the first time details in regard to city housing conditions, obtained by what is known as the Pittsburgh survey. In addition, the sessions will be full of matters of interest to all communities with the upward look, and I would gladly welcome as large a fraternal delegation as the Ontario Horticultural Association sees fit to send.

With hearty good wishes to the Association as a whole, to its individual members whom I have had the pleasure of meeting personally, and to yourself for many kindnesses, I remain,

Yours truly,

J. HORACE MCFARLAND, *President.*

Moved by W. B. BURGOYNE, seconded by Rev. Mr. SCOTT: "That the communication from Mr. McFarland be received and referred to the Board of Directors." I trust the President will call the Board together early in the morning to consider the matters that are suggested and mentioned in this communication, so that they may be brought before the association in the Directors' report which will be submitted to-morrow.—Carried.

HORTICULTURE IN GREAT BRITAIN AS SEEN BY A CANADIAN.

BY R. B. WHYTE, OTTAWA.

Last summer I spent nearly eight weeks in Great Britain, where I went on a purely pleasure trip, and more particularly to see what I could of the horticultural life of England.

Having planned so as to reach England in time to attend the first of the great flower shows, I landed in Liverpool on May 24th and without delay took train for London. Expectantly, as the train pulled out of the station, I looked through the car windows, impatient to get a glimpse of the green fields and trim hedges, of the natural and artificial beauty of the landscape of England, the charms of which poets have painted in such glowing colors. Great as my expectations were I was not disappointed, for we had barely left the outskirts of Liverpool before we were all impressed with the wonderful attractiveness and beauty of the country, and during the journey to London I spent the greater part of the six hours with my eyes to the window panes of the cars eagerly scanning the country both far and near and enjoying the entrancing glimpses of scenes of the highest beauty. It was one continuous panorama, opulent in scenes renowned for their classic associations and for their natural beauty. Among all the beauty of the landscape, I was particularly impressed with the magnificent roads—as level as our asphalt pavements and in most cases lined with beautiful hedges, bringing them out in bold relief in the landscape.

The fields were cleaner than ours and there were fewer weeds; everywhere you looked it had the appearance of being what I might term "well groomed," and this was to be remarked all over the country with the single exception of quite a few miles in the north of England and south of Scotland, known as the Lake Region.

One of the things which impressed me very much when travelling was that almost all of the small towns and villages were conspicuous for the number of good large fields divided into plots about 30 by 50 feet near the outskirts of the towns. These plots are cultivated by the workingmen of the town in their overtime, and everyone who can possibly get a garden has one. This love and appreciation of flowers shown by the people of all classes, from the rich land-owner to the peasant, is so general as to become characteristic. Even the workingmen in their gardens grow great quantities of flowers; roses of every possible color, size and shape which we could only grow here with great difficulty are to be seen all over the place, running over the fences and up the houses to the second storey window. There you will see roses in thousands and tens of thousands, even in gardens about half the size of one of our city lots.

Nowhere is this characteristic love of flowers more shown than in the amount of money each city spends on botanical gardens and parks. Even in Glasgow, which is world-famous as a commercial city, they have the most beautiful botanical garden open to all citizens, with extensive greenhouses open every day in the week, including Sunday. In these gardens they have growing specimens of all the leading wild flowers. This a most valuable educational feature. In London, more than in any other city in the world, they show their appreciation of parks and gardens, and there are some 6,000 acres in parks in that city, some of which are very large. Hyde Park, including Kensington Gardens, has 630 acres; Regent Park, 472; Battersea, 200 acres; all in the very heart of London. Outside the City, the County Council have very large parks, Epping being 5,600 acres. After my return to Canada, I read in the "London Garden" a letter from a horticulturist drawing attention to the floricultural interest or beauty of 10 parks right in the City of London, running from 200 acres downwards, not one of which had I seen. This will emphasize how difficult it is to see in one short holiday all there is to be seen in that wonderful city. In addition to these, there are innumerable small parks and squares scattered all over. One distinguishing feature of London is that wherever it is possible to grow a tree or have a bed of flowers they do so, and there is never any land allowed to go to waste. In the very heart of the city between Fleet Street and the river where land is worth a fabulous sum there is a most beautiful garden, about 3 acres in extent, known as the "Temple Garden."

My object in going to England when I did was to be in time to see the Temple Show of the Royal Horticultural Society of England, which is considered the greatest flower show in the world. It is a most wonderful sight, and although I went expecting to see a great deal, I must say that my most sanguine expectations were not disappointed.

The Royal Horticultural Society has 11,000 members, mostly in the British Isles. There are about half a dozen members in Canada and perhaps a dozen and a half in the United States. The subscription price is $5.00, so that their funds enable them to do a great deal, and on a large scale.

I must explain that the "Temple" is not a religious building, but takes its name from being originally a lodge of the Knight Templars of England and has been maintained by the Law Society since the 12th century. In 1346 it came into the possession of the "Students of Common Law" and has ever since been their home. One hundred years after that it was the scene of an important historical event. Shakespeare in King Henry VI. says:

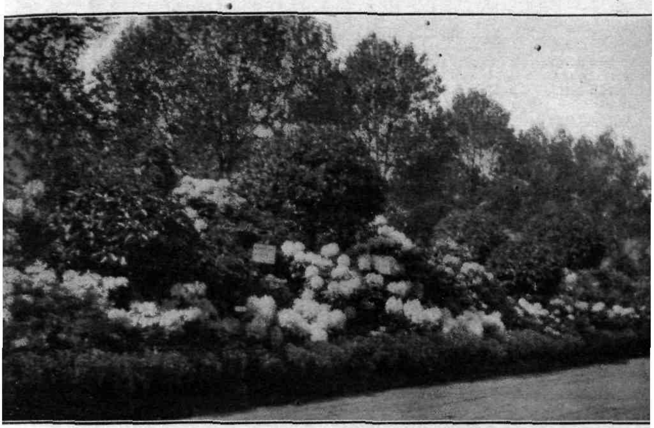


Photo by R. B. Whyte

Rhododendrons at Temple Show, London, England.

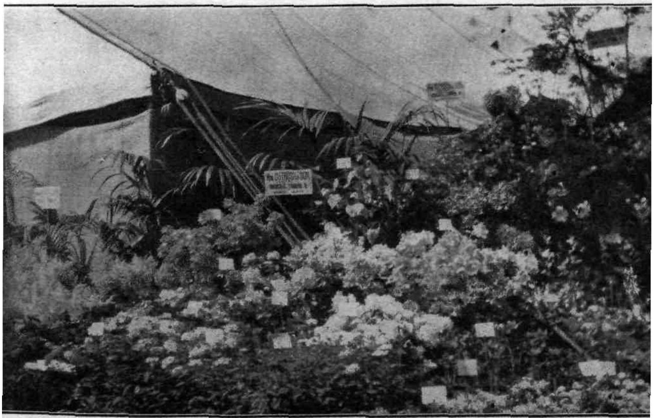


Photo by R. B. Whyte.

At the Temple Show, London, England.

"SUFFOLK: Within the Temple Hall we are too loud; the garden here is more convenient.

"PLANTAGENET: Let him that is a true born gentleman and stands upon the honour of his birth, if he supposes that I have pleaded truth, from off the briar pluck a white rose with me.

"SOMERSET: Let him that is no coward nor no flatterer, but dare maintain the party of the truth, pluck a red rose from off this thorn with me.

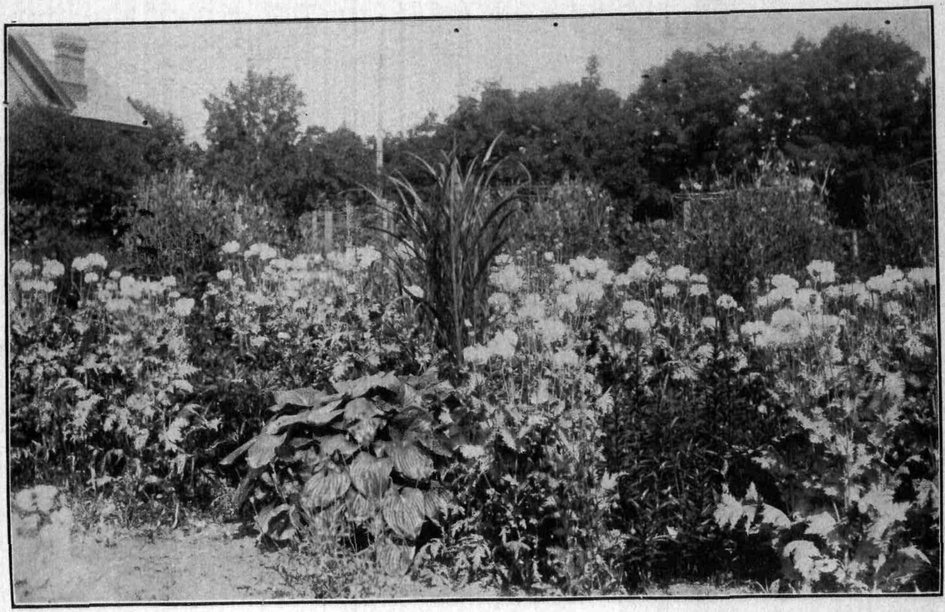
"WARWICK: This brawl to-day grown in this faction in the Temple Garden shall send between the red rose and the white a thousand souls to death and deadly night."

That war waged from 1455 to 1485, and many thousands of Englishmen were sent to "death and deadly night." The Temple Garden is now known to horticulturists as the place in which the Royal Horticultural Society holds its principal spring show. It fulfils the function performed by our Horticultural Societies and the horticultural branch of our Department of Agriculture. In England the Government gives no assistance to Horticulture.

In the garden there is a large piece of grass upon which the Society pitch their tents and hold their shows. They had five tents, and these were filled to overflowing, many of the exhibits being placed in the open. There is a great difference between that show and those held in this country. There they have no competitive shows, and practically all who enter for exhibition are professionals who are interested in pushing their own particular lines.

The space allowed for exhibit is divided among the different applicants; for instance, a firm will apply for so many feet of space. They show just what they choose. There is no limit to quantity or to the arrangement of their shows within the space allotted. All the exhibits of flowers were scattered throughout the different tents, with the exception of orchids, which were kept all together. The show was held for 3 days, beginning at midday. The first day the admission was 10 shillings, about $2.50 of our money. The next day members and ticket-holders only could get in from 7 o'clock in the morning till noon. I never expected to see so many there when I wandered in about half past seven, but the tents were pretty well filled. *Thousands of people attended and took a particular interest* in everything. I was as much interested in the people as in the flowers, as it was a surprise to me to see so many of the visitors taking notes of the various exhibits and intelligently discussing the merits of the different flowers. If anyone goes to our leading exhibitions he will not see one in a hundred taking such interest in the flowers and fruits exhibited. We frequently hear that the Englishman is slow in business and not as keen as we are on this side. So far as the Horticultural firms are concerned, I can say that they are as sharp business men as I have ever met. The different firms there had their clerks at the shows taking down orders just as fast as they could write them. I saw a nice collection of Dahlias and some fine Sweet Peas that had been grown in the greenhouse. These were grown specially for the show in order to get orders from people before planting time. The perennials and May-flowering tulips made a magnificent show; of the latter there were some very large exhibits by the tulip growers. You may think it strange that these people should be spoken of as growers of tulips. I may tell you that the English and Irish growers are now very much ahead of the Dutch tulip growers for May-flowering ones.

At this show one of the most gorgeous sights was the Orchid exhibit. There were more there than would fill this room three times over; one exhibitor had enough to almost fill this room. Colonel Holford is one of the leading orchid growers in England, and has a most intimate knowledge of them, and the hour I spent with him going over his flowers very much impresed me with the intimate knowledge he had of orchids under cultivation. He



Double White Poppies.

Photo from R. B. Whyte.

evidently knew as much about them as any practical gardener could know. He has originated a number of new varieties. Colonel Holford and Sir J. Coleman are two of the biggest amateur growers in England.

At that show I saw some Rhodendrons which were most beautiful. The Clematis also were very fine. I made a list of about a dozen which I considered the best, they are: Fairy Queen, pale mauve; Mrs. Hope, lilac; Marie Boiselot, white; Nellie Moser, lavender with dark centre; Henryii, white; King Edward, mauve; Languinosa candida, bluish-white; Lord Neville, purple, very fine; Lady C. Neville, mauve and lavender; Belle of Woking, double, pale lavender; Mrs. George Jackman, white; Jackmanii alba, double white.

Some of the tuberous begonias at the Temple Show had large double flowers at least 5 inches across, pinks, yellows and whites.

The Malmaison Carnations were larger, finer colored and more highly perfumed than the American ones. They were shown on very long stems, generally about 25 in a vase, well spread out and with asparagus foliage in between. T. S. Ware had a large vase of Enchantress carnations with pale blue larkspur mixed in between, which made a very effective display.

There were also some fine sweet peas at this show. They were particularly well grown, with large flowers on long stems. Besides these there were Calceolarias and Gloxinias in wonderful profusion and all very beautiful.

The rose show contained magnificent specimens of Mrs. John Laing, and Frau Karl Druschki. Some of the specimens I saw were from 5 to 6 inches across, and excellent flowers. One way they grow roses which is very different from anything we can do here is in tree form or standards. Frau Karl Druschki shown in this form looked very beautiful with the branches hanging down. Some of these plants must have had at least 100 flowers on them, and it certainly is a most beautiful way of showing growing roses. They grow Ramblers in the same way instead of training them up the walls. One of the best of these is Lady Gay, a little, double, pink rose, about 1½ inches across. The roses on the trees were so numerous that the green of the foliage was almost hidden. Other very fine varieties which were shown there were Dorothy Perkins, Minnehaha and a new and very beautiful rose, Tausendschon.

Another plant they grow there in great profusion and which made a most beautiful display is Iris Hispanica. There are very few of these flowers grown in Ontario, but over there they grow by the acre. I saw it everywhere, in the shows and in the shop windows in great profusion and they must have grown it in very large quantities in the neighbourhood of London. The variety used was chiefly yellow, and it was sold in millions and at a low price.

The most interesting things there were the rock plants, such as Veronicas, Anemones, Saxifragas, and Thymes. At the exhibition the crowds were always to be found about the displays where they had a lot of these. A rock garden in England is very different from what we have here. A rockery with us is chiefly a pile of stones covered with foliage for about 10 or 12 feet. I saw rockeries there which were more than five acres in extent. Every person who has a garden of any size has one.

I saw a display of 100 kinds of apples in good preservation on May 27 and all grown in England. We could not get such an exhibit here at that time of year. The bulk of them were strictly English varieties. These apples were exhibited by the firm which had kept them in a fruit house and not in cold storage.

In addition to the Temple Show, the great show of England, the Royal Horticultural Society have a building of their own, where they hold an

Photo by R. B. Whyte.

Purple Rudbeckia.

exhibition every two weeks. They were not on anything like as large a scale as at the Temple, but they were more interesting and more useful, as it was difficult to understand and see everything in such a tremendous show as the Temple. At the first show of the R.H.S., the exhibits were chiefly Orchids, Rock plants, Perennials, Delphiniums, and Pyrethrum. Pyrethrum grows there to very much greater perfection than with us. They have some very beautiful ones. I have tried several times to get the named varieties out from England, but have never succeeded, as they have always been dead *when I got them and I have had to be satisfied with what I could grow from* seed, and while I have sometimes got good flowers, the great majority of the seedlings are worthless.

In Delphiniums also I saw some magnificent plants. That is another thing they are very much ahead of us in. I have seen some good Delphiniums in this country, but the very best I have seen were very inferior to those I saw in England.

In connection with the Royal Horticultural Society there is a committee whose duty it is to examine new things and to award certificates. If this committee thinks an introduction worthy they give it an "F.C.C." certificate, which is much sought after, as when a nurseyman puts an "F.C.C." ticket on his goods it means getting a higher price for them.

The Lupines, were most beautiful shades of white and pink and yellow. There were great masses of them and they were very effective and beautiful. Of Cannas there was a good show, the plants having been forced. Some of the Fuchsias were nine feet high and from three to four feet across. I saw bigger ones later on at Glasgow Botanical Gardens, where some were nearly fifteen feet high.

At this show I saw the first Oriental Poppies of the season. The pinks were the most popular, the salmon pinks being very beautiful. At the second show, on June 23rd, Paeonies were a leading feature. I went over the exhibits very carefully and noted the names of every paeony which I considered to be really good. (Those names appear in a list published elsewhere in this Report.)

Another plant I saw there, which we do not grow to anything like the same extent, was the Ivy Geranium. It is by far the most beautiful plant of that type to grow for window boxes. I noticed the windows decorated with boxes of Ivy Geraniums, and they were a mass of bloom. I asked one of our Canadian florists why he did not grow them. He said it was because we cannot get the bloom on them. It is a pity, because the window boxes I saw were a long way ahead of anything I have seen in this country. Every flower store and window there have some Ivy Geraniums, the pink being the most popular.

At this show there was a magnificent collection of Irises. Some beautiful specimens of Orientalis Superba, yellow and white, and longipetala, lavender and yellow were here exhibited. These are both very beautiful flowers and well worth growing.

I was at the Franco-British Show on June 24th. It was a great exhibition, and the outdoor Horticultural display was very interesting. The space was divided among some of the big firms and was laid out in flower beds and shrubs planted in between.

I attended the special flower show in the Music Hall. This was open to both French and English growers, and there were some very fine exhibits of paeonies and cannas and sweet peas. Here I saw these at their best. They do not show Sweet Peas all bunched up as we do, but keep each spike separate, and they go to a lot of trouble in doing so. The average length of

Photo by R. B. Whyte

Oriental Poppies.

the stems there was about ten inches, with as many as five flowers on some of them. The vases in which they were shown were about 12 or 14 inches in length, and were sometimes of tin painted green, and sometimes glass. They were all tall so that the spikes could be spread out well. Some of the best exhibitors mixed Gypsophila—or Baby's Breath—with the peas. The quantity shown was enormous.

The French and English exhibits of strawberries, also, were wonderful. they were not shown in boxes such as we use here, but were nicely put up in flat cases and laid either on moss or strawberry foliage. Some of the berries were as big as an average Fameuse apple. I had no idea they were so much superior in size and quality, and the quantity they grow per acre is stupendous. One man told me that he picked 50 tons—that is 112,000 boxes—in one day, and that he picked that quantity several times during the season.

The next place I attended was the Holland House Show. This was held right in the heart of the City of London. This and the Temple are the two greatest exhibitions of the year in England. The Holland House Show is on a much larger scale than that at the Temple; in fact there were so many exhibits that some of them had to be put outside.

Here I made a list of what I considered to be the best Sweet Peas of each colour. It is a very difficult thing in a collection of, say, 100 or 150 kinds of Sweet Peas to put accurate names to the colours. My descriptions may possibly not harmonize with the catalogues, but the colours I have given were as they appeared to me.

In White there are four very fine ones, viz., Norah Unwin, Dora Eckford, White Spencer, and Etta Dyke. These were very much better than any of the older whites.

In Primrose, I have Mrs. Collier and Primrose Spencer. On the whole, I think Mrs. Collier is the better. A very beautiful combination which I call primrose and pink, which was a mixture of these two colours, was very attractive. The best of these were: C. W. Breadmore, Dora Breadmore and Evelyn Hemus. These are three of the very best of the Sweet Peas I saw.

In Blush, Elsie Herbert, Mrs. H. Sykes, and M. A. Lindsay were the best.

Of what I call Pure Pink, the best were Paradise (this came out about 3 years ago), Enchantress—said to be about the same colour, and it certainly was very close to it, Audrey Crier, Olive Ruffell, and Princess Victoria.

Among Salmon-pink: Constance Oliver, Nell Gwynne, Sutton's Queen, and Queen of Spain were the best. There were several others very fine, but these four are all new. Sutton's Queen was very beautiful; in fact, the most beautiful sweet pea I ever saw. It was a lovely shade of pink, large, and grew 4 to 5 flowers on a stem, and very fine long stems.

In Rose: Miss Willmott, Millie Maslin, George Herbert, and Lady Farren were the best.

Rosy-red: Mrs. E. W. King—a new one—was one of the best.

Lavender: Doris Clayton, F. Dolby, Lady G. Hamilton.

Mauve: The Marquis and Mrs. Walter Wright.

Orange: Helen Lewis and Henry Eckford, and a new one, St. George, which was a very brilliant orange tinged with red, with perhaps a little more red than orange, was very striking.

Scarlet and Crimson: Queen Alexander, George Stark, and King Edward.

Maroon: Black Knight.

In Perry's exhibit there was a little lake in which were water lilies of various colours with foliage growing, or apparently growing, the whole making a beautiful water garden. That exhibit must have cost him a great many hundred dollars, but he no doubt considered it a good investment.

At the National Rose Show, at Regent Park, was a large exhibit of roses of every imaginable description and every possible combination of colours and classes to suit everybody's taste. It is different from the Royal Horticultural Society in being a competitive show. Prizes are offered for certain definite quantities and classes. When they ask for 24 kinds of roses they do not separate into different kinds but show Hybrid Perpetuals and Hybrid Teas all together. By far the largest proportion were Hybrid Teas. One very effective display was in the class in which they asked for 12 roses of J. B. Clarke, a brilliant red, and 12 of Frau Karl Druschki—pure white. In this class there were 7 entries, all shown in boxes 3 ft by 1½ ft. These roses were set in moss and arranged alternately red and white. Karl Druschki was the most beautiful white there and contrasted well with the brilliant red, which was very beautiful.

To make as large a competition as possible they had about 80 classes, some for professionals, others for amateurs. Those who did not grow less than 2,000 plants had a class by themselves; those who grew less than 2,000; those who grew under 1,000; and those who grew under 200. Anybody who grew less than 200 rose bushes was not considered; so you can have some idea of the extent of rose growing in England.

My remarks on this subject would be incomplete without a reference to the wild flowers of the country and how they compare with ours. When I came to compare theirs with ours, we are much ahead of the English woods in wild flowers, not only in variety but also in beauty. I had to travel a great many miles in the country about London, and my attention was everywhere attracted by the very brilliant yellow bloom all along the railroad, and all through the country the prevailing colour in the month of May was yellow. Here, our yellows come in the fall, with our Golden Rods and Rudbeckias, but in England the prevailing colour in May and June is yellow.

Of all the wild flowers I saw there the Blue Hyacinth is the best. It is a blue of the most beautiful shade and has a pleasant perfume. It is very much like our Roman Hyacinth in shape but is a little taller. I was a little too late to see the Primrose at its best, but from what I saw of it it must be a very attractive feature in the landscape in its season. The yellow Gorse also took my attention with its most brilliant, gorgeous yellow colour, and great masses of it; but all its beauty is in its flowers as it has most disagreeable prickles and thorns.

Another yellow flower, called Broom, is also a very beautiful shrub which grew in great abundance everywhere. The Hawthorn is not nearly as common throughout the country as I had expected to find it and the trees were not any better than ours here.

Another yellow flower was the Laburnum, the most beautiful small tree I ever saw. It grows about the size of our Rowan Tree, the clusters of flowers hanging in great profusion.

These are really all the spring wild flowers of any consequence that I saw in England. In the woods, particularly in the South of Scotland, I could not find anything which would take the place of our Hepaticas, Spring Beauties, Dog-tooth Violets, Bellworts, Squirrel Corn, and Trilliums.

Money and skill, and the experience and care of centuries have given

to the landscape picture a "finish" which produces an agreeable serenity as the eye takes in the changing scenes when journeying through the country—and one is impressed, and still more impressed by the everywhere evident—I might say national—love and appreciation of the beautiful in nature.

A few centuries hence Canada may boast of some such National characteristic. *It is our duty to plan for that future* and to inculcate in the children of to-day, to be continued and developed in the generations to come, that love for and appreciation of the beautiful and refined, not only in the Arts and Sciences, but also in Horticulture, with the ultimate object "Beautiful Canada."

Mr. Whyte, in answer to a question as to Rhododendrons, spoke as follows: They grew there to a profusion, beauty and quality we do not know anything about here. I saw probably the finest show of these ever seen in the world, such variety, beauty of color, and shape, and wonderful perfume. You could see big bushes five, six, seven and eight feet high. It is a plant we cannot grow here. There were a great many of these at the Temple Gardens. The outside shows there was almost as large as the one inside flowers, shrubs and trees being shown out of doors. There was also another thing in connection with the exhibit, they grow goose-berries in the tree form. It is a very interesting thing to see them on a tree six feet high.

A. McNeil: Mr. Whyte has given us a splendid talk as to the larger gardens. Could he tell us as to the extent to which horticulture is engaged in by the laboring classes? Very small gardens, I think, are what we would be specially interested in.

R. B. Whyte: Gardens are universal. Every body wants one. One of the first things I noticed after leaving Liverpool was a large market garden, where everything was in small quantities, and there was a path around each plot, and I afterwards found out these were workmen's gardens, and in one thousand small towns they had on the out-skirts a large field divided up into these little gardens that were worked by the working people in the city. They pay a small sum for the use of this land, and cultivate it for their own benefit. Whatever road you travel out of London, you will see at the back of the houses, and in front, little flower gardens that are perfect pictures with great clumps of lilies and roses. You will see beautiful roses like Mrs. John Lang, and nearly every gate is covered with climbing roses, and they use the very best kinds such as the Carl Druschki. These are the roses that grow around workmen's houses. I do not recollect a single railway station that I passed that had not a flower garden with roses growing over the fences and up the walls. Wherever there was a place to grow anything there were roses.

THE CIVIC IMPROVEMENT MOVEMENT IN ONTARIO.

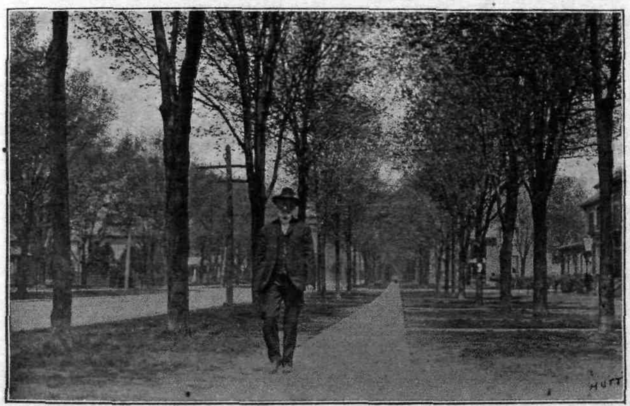
By H. L. Hutt, O.A.C., Guelph.

It is very evident to those who travel, or even to those who merely read the papers, that a strong movement has set in on this continent for civic and rural improvement. Just what it may result in, it is impossible to say at present; but it is safe to predict that the movement is going to have a marked effect on the appearance and character of our country generally.

Its Origin.

The civic improvement has been the outcome of a growing appreciation of art, and a desire for real beauty, which has resulted from the prosperity of the times and the tendency to travel. Its origin might, no doubt, be traced to Europe, where many of the towns and cities have become centres of attraction for American tourists. From the old land we have learned much and have still much to learn. European travellers always speak with delight of the architectural and landscape beauties of Paris, Brussels, Vienna, and Edinburgh.

Just when and where the civic improvement movement first made its appearance here cannot be stated definitely, but like many other movements, some good, and others not so good, its effects were first seen in the country to the south of us. The Town of Stockbridge, Mass., claims the



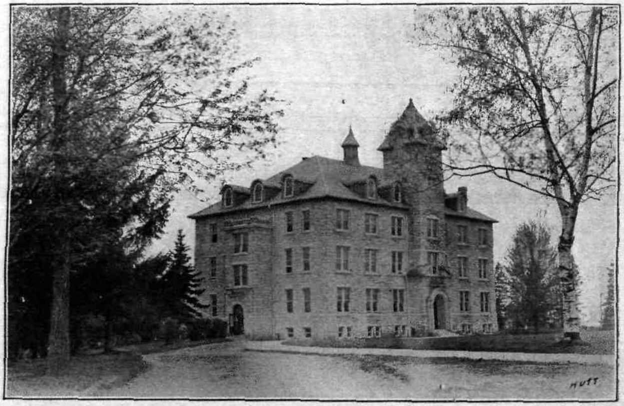
The planting and care of trees on the streets of every village, town and city should be under the management of a Park Board or Commission, which can adopt a definite plan for the planting of trees on streets, and see that they are properly cared for. This is the result under such management on Vansittart Avenue, Woodstock.

honor of having, nearly fifty years ago, the first organization having for its object the preservation of natural beauties and the general improvement of the village surroundings. In later years many organizations having similar aims have been formed in various parts of the country, but the one which has been the most active in giving a national impetus to the civic improvement movement has been the American Civic Association. This was formed in 1904, by the union of two associations which had for years been working along somewhat the same lines, viz., "The American Park and Outdoor Art Association" and "The American League for Civic Improvement." The new organization was said at the time to represent four hundred and eighty local improvement societies.

Mr. J. Horace McFarland, whom many of us had the pleasure of hearing at some of our local society meetings last spring, has been president of

the new association since its formation, and he has by judicious use of the press kept the work of the association prominently before the people of the whole continent. There are at present twenty-two members of the American Civic Association in Canada. These are scattered here and there from Halifax to Calgary. In this connection, I may say I think it would pay all of our Canadian Horticultural Societies to get in as close touch as possible with this progressive national association, and make the work, at least, if not the organization, international in character. Our Superintendent, Mr. J. Lockie Wilson, and I expect to attend the annual meeting of the American Civic Association to be held in Pittsburg, P.A., next week, and we hope to get many pointers that may help us in furthering the work in this country.

The organization of our Provincial Horticultural Association three years ago was in itself a result of the influence of the American Association



Galt has made more progress in park making than any town of its size. May this not be due to some extent to the attractive surroundings of the Collegiate Institute, at which many of Galt's leading citizens have been educated?

formed a year or two previous. For it was felt that we should have a Canadian organization with similar unselfish aims.

Attending this convention, we have delegates from a large number of the sixty local Horticultural Societies already formed in this Province, all interested in promoting local civic and rural improvement. It should be the duty, therefore, of this Association to take the lead in assisting, directing and promoting such movements in all parts of the country. We have a big field for operations, and a splendid work to do.

THE AIM AND OBJECT OF THE MOVEMENT.

The aim of the civic improvement movement, put in a nutshell, is for "A better and more beautiful America." The scope of this improvement may be inferred from an enumeration of the departments of work under-

taken by the American Civic Association. These are fifteen in number, with a Vice-President at the head of each department, and include:—Arts and Crafts, Women's Outdoor Art League, Children's Gardens, School Extension, City Making, Factory Betterment, Libraries, Outdoor Art, Parks and Reservations, Public Nuisances, Public Recreation, Railroad Improvements, Rural Improvements, Social Settlement, and the Press.

One of the strong features of the work of the American Civic Association has been its use of the press in educating public sentiment and spreading abroad information regarding what has been accomplished in different places and what may be done in others.

In Ontario we need not at present undertake so many kinds of work, but I think it would be well for us to begin at once to concentrate our efforts on a few lines which need most attention at present. To this end, I would

The removal of street fences is an indication of the progressiveness of a town or village. The town of Leamington has many such indications of progressive spirit.

suggest that our association appoint committees or departments this year to deal with such problems as:—

1. The Improvement of Home Surroundings.
2. The Improvement of School Grounds.
3. Care and management of streets and boulevards.
4. Establishment of Parks and Playgrounds.
5. Abatement of Public Nuisances.
6. Promoting Rural Improvement.
7. The Press.

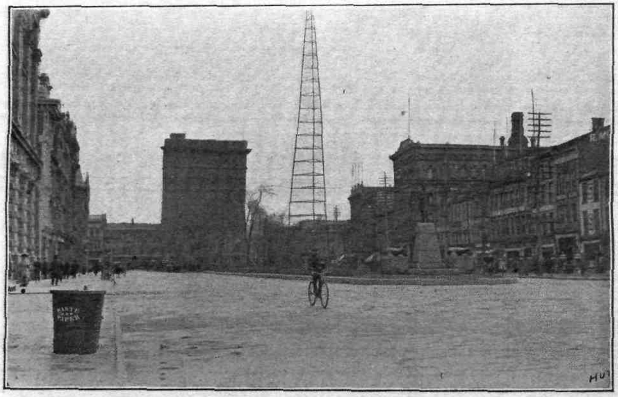
Many others might be added, but this would make a good beginning. If the right person were put at the head of each committee and work was begun at once, this association would make itself a power for good in the country, and we should have valuable reports from each at our next meeting.

Evidences of Progress in Ontario.

As a matter of encouragement to those who may be looking for more rapid changes, it may be well to call attention to the steady and even rapid progress that is being made in many parts of the Province. There have been a number of agencies contributing to this progress which may be used to still greater purpose in the future:—

1. The more general use of cement in the making of pavements and sidewalks has had a marked effect on almost every town and village in the country. In many Ontario towns cement has almost entirely replaced the old wooden walks during the past ten years.

2. Accompanying the laying of permanent walks has come the removal of street fences. In many up-to-date Ontario towns and cities we may now



Gore Park, Hamilton, is a delightful oasis in the heart of the city. Such places afford suitable sites for drinking fountains and commemorative statuary.

go black after block on the residential streets and see no fences, either in front or between lots.

3. Immediately following the removal of fences has come the proper grading of the lawns and boulevards to the line of the pavement, and more attention to keeping the grass nicely cut.

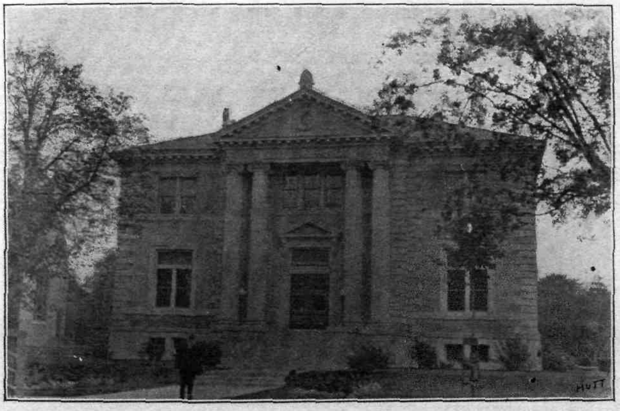
A prominent citizen of Woodstock told me that it was not many years ago that he owned the only lawn mower in the town. Now it would be hard to find the citizen who did not own and use one regularly.

4. In some places where systematic tree planting has been done along the boulevards, there are now fine avenues of street trees. But just here is where so many towns have been spoiled because the street planting has been left to the individual property owners, no two of whom have the same idea of what kind of trees should be planted, or where they should be placed on the boulevard. This has rendered it impossible to make a uniform continuous row of trees, because of the great variety selected and the haphazard method of their arrangement.

The street planting and care of the trees in every village, town and city should be under the management of a Park Board or Commission, which can adopt a definite plan for the regular planting of certain kinds of trees on certain streets and will see that they are properly cared for.

5. In a number of our cities and most progressive towns, Park Boards or Commissions have been appointed, as provided for by the Ontario Parks Act. This means that much greater progress will be made in such towns, and other places will wake up to the necessity of similar action.

Within the last few years many of our Ontario towns and villages, to say nothing of the larger cities, have seen the advisability of making park reservations, and have purchased lands for park purposes. In some cases, the development of these has been undertaken by the town council, and in others by a Park Board; but experience has proved that greater continuity



The St. Catharines Carnegie Library. Artistic public buildings of this kind amid beautiful surroundings add to the dignity of towns and cities.

of action may be expected from a Board or Commission which is more or less permanent.

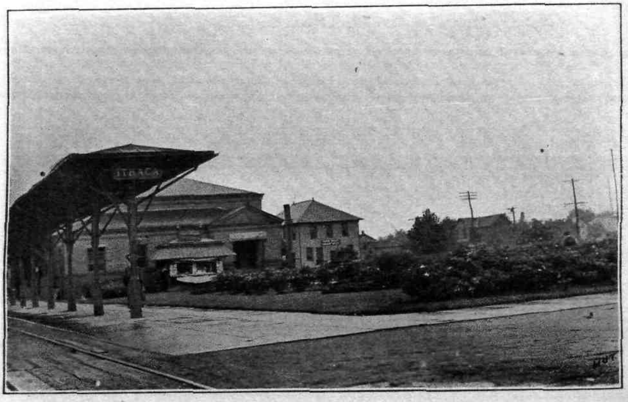
Evidences of progress in the establishment of parks may be seen in such places as Ottawa, Brockville, Havelock, Toronto, Brampton, Hamilton, Galt, Guelph, Berlin, Waterloo, Woodstock, Stratford, Barrie, Orillia, London, Leamington, and no doubt many other places which I cannot now mention.

For a town of its size, I know of no place making greater progress in the establishment of beautiful parks than Galt. It has now three good sized parks, and seven or eight small plots and squares about the town, which help to make Galt beautiful.

In some places, the local Board of Trade has taken the initiative in promoting civic improvement, because they realize the fact that beautiful surroundings are a potent factor in attracting citizens and increasing trade.

The Orillia Board of Trade a couple of years ago published a neat little booklet encouraging the citizens to unite in making Orillia an attractive spot for summer visitors.

From the "Ottawa Citizen," we clip the following: "The people of Ottawa are taking an increasing pride in the appearance of the Federal Capital, which the Dominion Government has also done so much to beautify. Ten years ago there was only one park in Ottawa, and most of the private residences were walled in by high fences: now there are seven parks, nearly all the fences have been taken down. so that gardens and lawns are open to the street, and those having available grounds for the purpose are planting them with flowers and shrubs, and generally adding to the beauty not only of the premises but of the locality." And so the improvement is going on steadily in many parts of the country.



A railway station and its surroundings should be made attractive. Through it our impressions of a place are formed. American Railway Corporations have made many of their station grounds veritable beauty spots.

The Relation of the Horticultural Society to Civic Improvement.

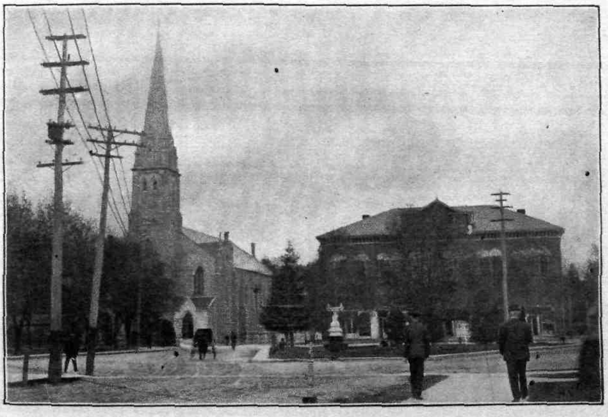
In some places the local Horticultural Societies have taken an active part in promoting civic and rural improvement, particularly along horticultural lines. In other places the work has been confined too much to a few special features of improvement, such as floriculture or window gardening. Such societies should be encouraged to reach out and take a broader view of their opportunities. I would suggest the following as a few of the avenues through which the local societies might work to good advantage in promoting improvement in their respective communities.

1. By conducting an educative campaign in awakening public interest to an appreciation of the value of neatness, order, and beautiful surroundings. To this end it is well to make good use of the local press.

2. By enlisting the support of the rising generation by flower competitions, and also by making school as well as home surroundings as beautiful as possible. *Young people brought up amid beautiful surroundings may* be counted on in later years to work for rural and civic improvement whereever they may be placed. I am looking forward to an early awakening of School Boards to the importance of improving school grounds, and have prepared a bulletin on that subject for the Educational Department this year.

3. By seeking the co-operation of other influential local organizations, such as the Town Council, Board of Trade, or School Board, which may be willing to assist in making local improvements. In union is strength.

4. By working for the appointment of progressive local Park Boards or Commissions, and urging such Boards to get possession of suitable lands



The angles made by converging streets often afford excellent opportunity for making beautiful resting spots. Galt has a number of these. How long will towns and cities tolerate the disfigurement of streets by unsightly telegraph and telephone lines which might be readily placed underground?

for park purposes while they are cheap. Plans can then be adopted for their gradual development and improvement.

The Ontario Parks Act provides that one-half mill on the assessment may be used by any Park Board so appointed for such purposes. And whenever such money is judiciously expended. the increased value of adjacent lands will soon pay a good share of the cost of such improvements in increased revenue from taxes.

The Park Board in any town might also be asked to establish a small nursery, where trees, shrubs, and vines could be grown in quantity for civic improvement work, and could be supplied to the citizens at cost for planting in their own grounds.

5. Every property holder should be encouraged by precept and example to contribute his share to the general improvement of the place by making his own lot as attractive as possible. If every citzen did his share, what a change would take place in the appearance of our country. Tourists from all over the world would come to see Beautiful Ontario.

Legislation Desired.

There are a few things upon which it would be desirable to have some legislation in this country, and which this Association might be instrumental in getting, if it were to join forces with other organizations which have been asking for the same:—

1. Legislation to control the bill board nuisance and advertising monstrosities which disfigure architectural beauty as well as natural scenery.

2. To prohibit the butchery of street and roadside trees by telephone and telegraph companies, and compel the placing of their wires underground wherever they enter town or city limits.

3. To prevent dogs running at large within town or city limits.

There may be room for diversity of opinion upon all of these questions, but there can be no two opinions about it, that dogs and bill boards and unsightly telegraph and telephone poles are at enmity with civic improvement.

The Chairman: We have been all very much interested in the paper read by Professor Hutt, and also in the lantern slides. I am sure everybody was very much interested, and if we could have these scenes reproduced before the people of the Province, I am sure they would have wondrous results.

A vote of thanks was then passed to Hon. Mr. Duff for being present and taking the chair.

SECOND DAY—MORNING SESSION.

At the morning session on the second day the President, Major Snelgrove, occupied the chair, and called for the presentation of the Directors' report.

DIRECTORS' REPORT.

Your Board of Directors desire to report that during the year, two lirectors' and two executive committee meetings were held. At the first neeting held after the conclusion of the last annual convention, arrangenents were made to petition the Ontario Department of Agriculture to imend the *Horticultural Societies Act* in accordance with the resolution)assed at the last annual convention of this Association. This petition was luly presented. As you have been informed already by our Superintendent, he requests it contained were duly granted by the Government.

At an executive meeting held in Toronto at the time of the Exhibition n September, 1908, the programme for this convention was prepared.

At a meeting of the executive committee, held November 9, 1908, and t a directors' meeting held November 10, 1908, it was decided to make he following recommendations to this convention and to the incoming oard of directors:—

1st. That application be made to the Ontario Government for the renewal of the annual grant of $100 to this Association, promised and made in 1906 by Hon. Mr. Monteith, Minister of Agriculture, which grant, owing to an oversight, was not made to this Association during the year 1907-8.

2nd. That whereas the membership of the Horticultural Societies of the province during the year just passed has increased by approximately one-third, or over 2,000 members, imposing greatly increased expense upon the individual societies of the Province, and as the provisions of the Horticultural Societies Act, as adopted by the Government, were designed with the object of encouraging societies to increase their membership and usefulness, it is recommended that a deputation be appointed to wait on the Government to ask in person, and by formal written petition, that the annual grant to the Horticultural Societies of the Province be increased by at least $2,000 a year.

3rd. That the officers of this Association as now constituted shall include a secretary and a treasurer only, instead of two secretaries and a treasurer as at present.

4th. That the constitution of this Association be printed in full each year on the programmes for the annual convention, as well as a statement showing the divisions of the province for which directors are elected each year.

5th. That such steps as may be necessary shall be taken to ensure this Association being represented on the Boards of Directors of the Ontario Horticultural Exhibition and of The Canadian National Exhibition, and that the new Board of Directors be empowered to appoint such representatives.

6th. That the Superintendent of Horticultural Societies and the Department of Agriculture be formally congratulated on the splendid annual report published for this Association this year, and that we recommend that in future reports the names of the persons whose homes and gardens are illustrated in such report be published in the report. It is further recommended that enough of these reports be printed each year to enable copies to be mailed to all the members of all the horticultural societies in the Province.

7th. That steps be taken to secure such legislation as may be necessary to enable municipalities to impose a tax on bill boards, and that the municipalities of the province be encouraged to impose a heavy tax on such bill boards so as to promote the movement that is under way all over the continent looking for the removal of these unsightly nuisances.

All of which is respectfully submitted, signed on behalf of the Board of Directors by,

H. J. SNELGROVE,
President.

H. B. COWAN,
Secretary.

November 11, 1908.

Moved by Rev. Mr. SCOTT, seconded by Mr. DIAMOND. that the report of the Directors for 1908 be received and adopted. Carried.

REPORT OF THE COMMITTEE APPOINTED BY THE CONVENTION OF THE HORTICULTURAL ASSOCIATION OF ONTARIO, NOV., 1907, ON THE INCORPORATION OF HORTICULTURAL TOPICS IN THE NEW SERIES OF SCHOOL BOOKS.

The matter in hand was considered at some length a year ago, and was the outcome of a submission in one of the papers read at the Convention of 1907.

In that contribution the concern of thoughtful men was expressed that if the present school books of the Province are to be changed, the new ones should have a conspicuous place for the first enterprise of the nation. It was stated, further, that one of the most important services that could be rendered by Government and people in this generation would be the training of our children into appreciation of the Creator's gifts in the soil, and in the best use of that gift both for the development of a sturdy Canadian manhood, and for the enlightened projection of the country's chief resource.

Your committee was asked to put itself in communication with the Government of the Province at an early day with a view to securing the introduction of the Horticultural features desired by the Association into the proposed new series of school books.

The first communication your committee received was from the office of the Prime Minister and President of the Council, acknowledging the receipt of our committee's first correspondence, and stating that the Minister of Education would take the matter into consideration. Two days after the receipt of the letter from the Prime Minister, your committee had this additional letter from the Minister of Education:

TORONTO, March 6th, 1908.

DEAR SIR,—I am in receipt of your letter, as also one written to the Hon. Mr. Whitney, and shall be pleased to consider the matters presented.

Many thanks for the trouble you have taken. I trust the result will be satisfactory.

Sincerely yours,
(Signed) R. A. PYNE,
Minister of Education.

A fortnight later we had a second letter from the Department of Education, in terms following:—

TORONTO, March 19th, 1908.

DEAR SIR,—I am directed by the Minister of Education to state, in reply to your letter of recent date, that the object of the new Readers will be to teach reading. It would be impossible to include in them special courses in different departments. An effort will be made in the selection of the topics to foster a love for nature, but instruction in the subject in the school programme will be provided for elsewhere. It may be seen during the present Session of the Legislature, when the Minister unfolds his policy, what steps are to be taken to secure effectively the purpose the Ontario Horticultural Association has in view.

I have the honor to remain,
Your obedient servant,
(Signed) A. H. U. COLQUHOUN,
Deputy Minister of Education.

Your committee recognize with the Deputy Minister of Education, that the object of the new readers should be "to teach reading." But the aim of this Association is to co-operate with the Department of Education in finishing such matter along horticultural lines as will so far improve the kind of reading, that the instructors of the rising generation may become

Victoria Park, London.

Photo by I. S. Pearce.

increasingly conversant with topics, which in our judgment are of special importance at this particular period of our national record making.

Probably no land under the sun has such substantial attractions to offer to the European and the American who are seeking a change of location as we have in Canada. Probably no country on either hemisphere is making a stronger bid to the man and his family belonging to another clime to come over and abide with us in our great Dominion. Multitudes, with particular inclinations and qualifications have yielded to our solicitations, have come to us, and have found no occasion to question the fairness of our advances to them. But the fact is, nevertheless, that thousands have come and have been sent back to the places where the came. And why? Because of their incompetency to handle the soil. Now, what are we doing in Canada, and more especially because of our favored situation and circumstances, what are we doing in Ontario to spread that intelligence among our own people which will make Canada's greatest asset, the soil, more engaging and more remunerative to the Canadian commonwealth?

The Ontario Horticultural Association is encouraging its own members, and also the official powers that the people of Ontario have created and established, to utilize the agencies within our reach for the most advantageous handling of our principal source of pleasure and revenue. We are not now dealing with the detail of a school book heading, we are aiming rather at a specific trench. And inasmuch as Provincial appropriations, are turned into Educational directions your committee recommends that this Horticultural Association shall re-emphasize its conviction expressed a year ago, and repeat its former request that through the influential agency of the new school book series, which is expected to be of lasting educational value to a large proportion of the people of this young and promising country, particular care should be taken to enhance the interest of our citizenship in the landscape, the garden, and the field.

All of which is respectfully submitted,

(Signed)

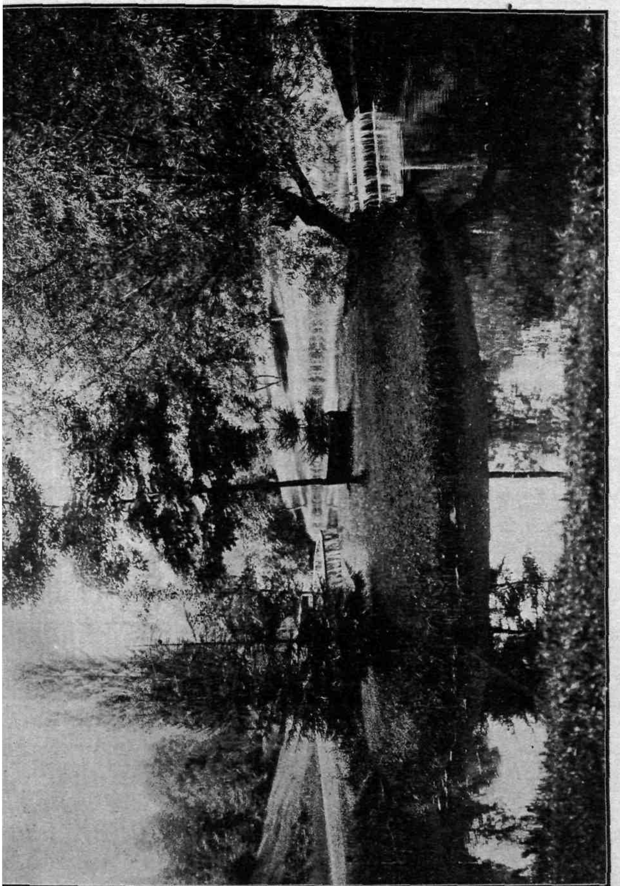
A. H. Scott, (Rev.),

Chairman.

W. B. Burgoyne,

J. S. Pearce.

Moved by Mr. Cavers, seconded by Mr. Short, "That the report just read be received and adopted." In moving the motion, Mr. Cavers said, "I desire to compliment the committee, especially on having sufficient moral courage not to accept the dictum—I use the word respectfully—of the Educational Department that the new books were intended to teach reading. The committee very properly draws attention to the fact that the kind of reading is a very important matter. I sympathize entirely and appreciate the sentiment expressed in the report, and I hope the recommendation made at the end of the report will be heartily adopted by the Convention, and that a similar committee be re-appointed to press the matter referring to the kind of reading that is to be embodied in the new books. The motion was carried.



Where Crystal Waters Fall.

TREASURER'S REPORT, 1907-8.

In presenting the following statement of the receipts and expenditures of the Ontario Horticultural Association for the year ending November 11, 1908, I regret to report that, owing to an oversight, the Department of Agriculture did not include the usual annual grant of $100 to this Association in the estimates for this year. Consequently, we did not receive the customary grant.

Receipts.		*Expenditures.*	
Balance from 1907	$ 86 10	Printing programmes, 1907 Convention	$ 8 35
Horticultural Society Fees: Oakville, Owen Sound, Perth, St. Catharines, Belleville, Hespeler, Ottawa, Stratford, Elmira, Cobourg, London, Seaforth, Kincardine, Hamilton, St. Thomas, Durham, Guelph, Woodstock	36 00	Refund London Hort'l Society fees, paid twice in error	2 00
Interest to Nov. 11th, 1908	2 75	Printing letter heads and envelopes	14 50
		Expenses W. B. Burgoyne attending Executive Committee meeting, September, 1907	3 60
		Exchange at Bank	10
		Balance on hand, Nov. 11, 1908	96 30
	$124 85		$124 85

Horticultural Society Fees for 1908-9 received during 1907-8:
Smith's Falls, Windsor, London, Hamilton, Kingston, Oakville, Cardinal, Walkerville, Brantford, Kincardine, Port Dover, Toronto, Springfield, Belleville, Thornbury, Goderich, Cobourg, Perth, Ottawa, Seaforth, Elmira, Bowmanville, Grimsby, Picton, Galt, Owen Sound, Clinton.

Total, 28 Societies	$ 56 00
Total amount on hand, Nov. 11th, 1908	152 30

H. B. Cowan,
Treasurer.

Audited and found correct.

A. O. Jeffery,
J. A. Ellis,
Auditors.

Upon motion the report was adopted.

The President: The office of corresponding secretary has been abolished, and in future we will have one secretary and one treasurer.

ELECTION OF OFFICERS.

The election of officers was then proceeded with and resulted as given on page 6.

AN INCREASED LEGISLATIVE GRANT.

W. B. Burgoyne: I hardly think it is necessary to go into this matter extensively, because it has been discussed by the Committee, and they have unanimously recommended that the Government be urged to increase the grant from $8,000 to an amount not less than $10,000. You have already endorsed the wisdom and necessity of this grant, and it is not necessary for

me to go into any argument to demonstrate to the Association the necessity for its increase. Yet there are some things that might be brought out, briefly, to show the wisdom of the present Act, and how it has worked out after an experience of two or three years. Prior to the present Act being introduced there was a condition that did not make for progress among Horticulturists. The Horticultural Grant was mixed up with the Agricultural Societies' Grant. If they were fortunate enough to be in a district where there were only two other societies besides themselves, they would receive $140, regardless of the fact that they might not have a membership of more than 50, the minimum required in cities; although I believe a smaller membership than that was allowable in towns and villages. If you will look at the last report of this Association, in which is tabulated the grants for 1906 and 1907, and the membership for these two years, you will see that in a city much larger than St. Catharines, where they had an Association with a membership of 53, they received a grant of $140, while the society in St. Catharines with a membership of 289 received $77. That was not a fair condition of affairs, and this Association recognized that, and the Department recognized it, and based the grant thereafter upon the work that was done by the various societies, and that has worked out, I think, even better than either the Department and officers of this Association could have imagined. Last year's returns did not show any very great increase in the total membership in the Province, but of those received this year by our Secretary, from 44 societies, 34 report an increase in membership and nine societies a decrease. But these decreases are very small. The increases are not confined to two large societies such as Ottawa and St. Catharines, where the increase is very large, but every society has enjoyed increases proportionately nearly as large as Ottawa. The society at Barrie increased from 67 to 132, or double their membership last year. The Village of Grimsby increased the membership in their society from 52 to 105, and Tillsonburg from 60 to 100. Woodstock increased 47; Strathroy 40, Galt from 160 to 206; making a total increase of 2,012 in 44 societies, or an increase in all societies of 45 per cent. We may very well congratulate ourselves that the Act has so worked out for the benefit of all societies in the Province. The expenditure has increased very largely, but not quite in the same proportion as the increase of membership; 28 societies report an increase of expenditure and 15 a decrease. The decreases are small, the increases large. The total net increase in expenditure of these societies is $33,230. These figures show most conclusively that the Act, as at the present framed, has worked out in the interests of the Horticultural Societies, and I think we are justified in asking for an increase even larger than 25 per cent, because the whole amount is not a serious thing for the Government of this Province, taking into consideration all the valuable work the societies are doing.

Mr. Whyte stated that they contemplated having branch societies, so that they may do work in the suburbs around Ottawa. In St. Catharines our membership is not confined to the city, as we have a considerable membership in Port Dalhousie, Merritton and Thorold. These members are doing work in the interest of the societies of this Province, and in the interest of the Horticultural work of this Province, and after these returns have been considered by the Department they should make a grant not exceeding $12,000, instead of $10,000.

MEMBERSHIP.

By J. F. Watson, Ottawa.

"The objects of our societies shall be to encourage the improvement of home and public grounds, by the planting of trees, shrubs and flowers, and otherwise promoting out-door art and public beauty."

Clearly, then, the Act incites us to increase our membership, since the more workers we enlist the greater will be the possibilities and probabilities of fulfilling the objects of our organization.

But, "How to increase membership?" is left to the Executive of each individual Society to answer. It is my privilege to tell you how the Ottawa Society answers that question, and I do so with pleasure, with the hope that my remarks may suggest to you methods whereby you may be ultimately successful in adding to your membership, and thus extending your influence for good.

The financial assistance proffered by the Ontario Government, under the provisions of the Act, was the incentive which aroused to greater activity a few enthusiastic horticulturists in Ottawa, and resulted in the organization of the Ottawa Society.

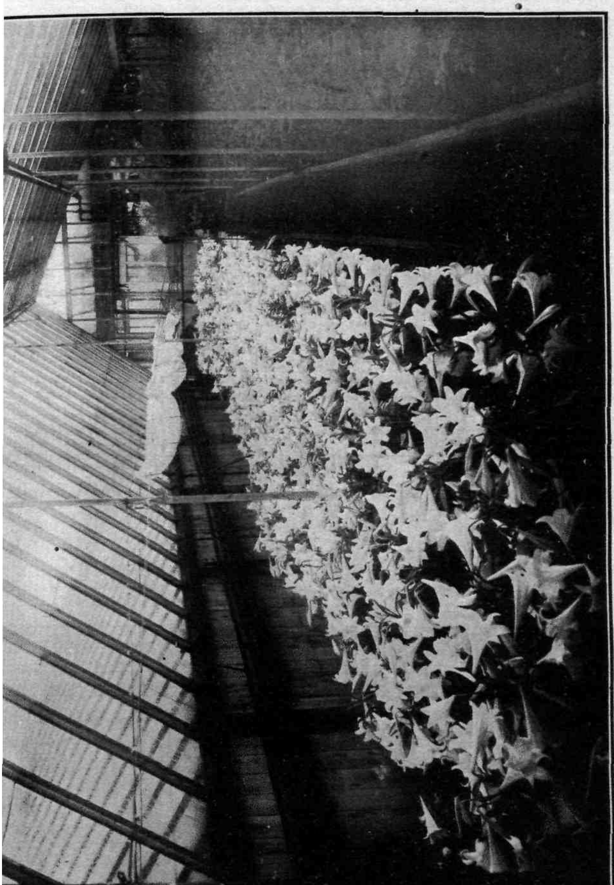
Financial assistance is necessary if we would successfully conduct the work of educating the public in horticulture, and financial assistance on a more stable basis than the erratic, voluntary contributions of the public. Permanency of revenue was offered by the Ontario Gevernment, and with such assurance our Executive had confidence to plan for future work, and to appeal to the public for co-operation.

In the year of organization 117 persons were enrolled as members, and each subsequent year saw a small increase, but until 1907 no special effort was made to add to our numbers, for the reason that the Government grant being limited, it was not possible for us to carry a large number of members, and at the same time fully develop the work planned. But, with the revision of that Act was presented an opportunity for enlarging the scope of our work, with a knowledge that the greater the activity, the greater the reward, not only in increased Government grant, but also in an extended influence for good in the community.

The new Act is just what the Horticultural Societies were waiting for if we would fully serve the purpose of our establishment, and the very best thanks of the Horticultural Societies of the Province of Ontario are due to the Government for the careful consideration given to our case, and the liberal treatment accorded us in the most excellently framed instrument by which we are governed.

Shortly after its passage, our Executive held a meeting to consider the new provisions and the extent of their influence on our work. At that meeting, in summing up, our President said: "It is evident from the excellent provisions of this Act that the Department has spared neither pains nor time in its efforts to frame an instrument which will be really satisfactory and effective, and is in earnest in its desire to help the Horticultural Societies of the Province. We can best show our appreciation of this thoughtful consideration of our need by making a special effort this year to extend our influence, and that we can best do by increasing our membership roll."

The response was an assurance from the members of the Board of their hearty co-operation. Such a decision meant increased responsibilities for each individual of the Executive, and a further tax upon his time, but as agents of the Department, and having accepted the responsibilities delegated to them they felt it their privilege to respond to the call, and they did so,



Ready for Eastertide.

content in anticipation of the reward which springs from a consciousness of a proper discharge of duty.

The growing of flowers and the beautifying of the home grounds is so pleasurable that we come to look upon it as a recreation or fad to be enjoyed as the spirit moves us, and we are free from the restrictive bonds of business tenets. This should enable us the easier to interest people, and so it does; but, nevertheless, those same people when they become members of the society desire to be treated in a business-like way, to the extent that such premiums as are promised they want to get, and they want prompt attention to their calls for information and assistance. In short, it matters not how unbusiness-like the members themselves may be, they demand to be dealt with in anything but a loose manner. Therefore, it is essential that the Board of Directors treat the matter as a business proposition, and not a fad, to be conducted in the most convenient manner and with the expenditure of no more exertion than is absolutely necessary.

We, in Ottawa, are fortunate in having an Executive of enthusiastic and capable Horticulturists, and most fortunate in that they are busy men, as the busy man is the one who has time to do anything, and he does things, while the man who has plenty of leisure and a surfeit of good ideas talks, but does not work. The policy of our Board has always been to consider the whole matter of governing the Society as a business proposition, requiring serious thought and unrelaxing effort.

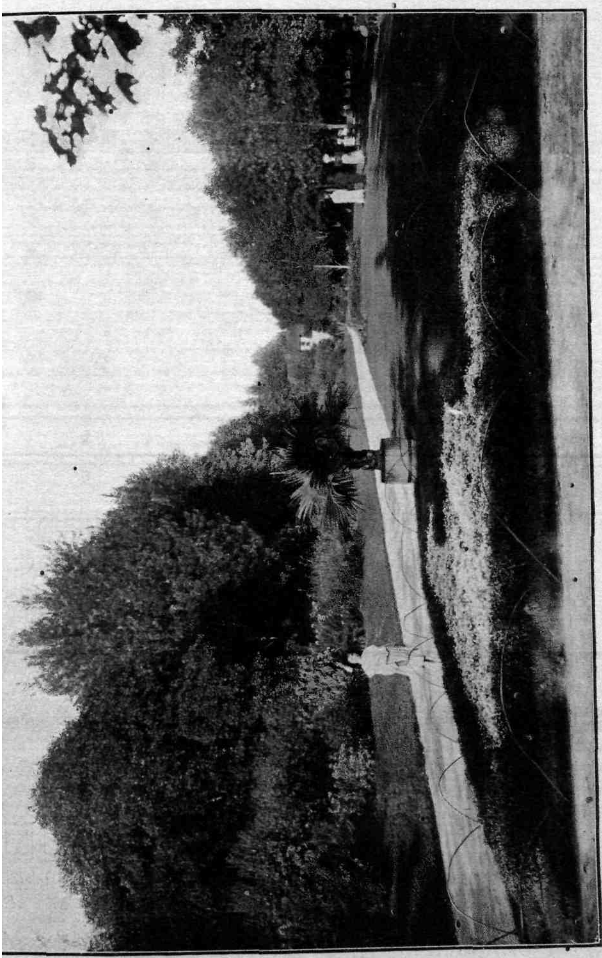
Every promise made in the annual announcement is faithfully fulfilled, and at the time stipulated. The public metings and exhibitions—which are held once each month from May to October—are opened punctually and conducted in a business-like manner. At exhibitions there is scope for the exercise of tact and judgment, before and after the judging, to impress upon the individual that he is an integral part of the whole, and that there are special privileges for none.

More particularly the Board's dealings with the Secretary are "strictly business." To him is left the responsibility of elaborating the policy of the Executive, and the carrying out of the details of their plans; they look to him for the successful conduct of the business details and to formulate a systematic plan of campaign for publicity, and largely to suggest the best methods of enrolling new members. While this work is left in the hands of the Secretary, every man on the Executive makes a point of covering the ground in his own immediate locality, and uses his best efforts to enlist the assistance of his own friends and acquaintances. This confidence and material support and co-operation of the Board is much appreciated by the Secretary, and is probably responsible for more results than might be expected.

In considering the question of how to increase the membership, the Secretary started with the theory that every worthy citizen would commend, and many actively encourage, any work making for the good of the community, and it was first necessary to make known the work and plans of the Society. For this assistance we turned to the press, since through that medium are suggestions carried into the family circle, and greater influence exerted than can possibly be obtained by printed matter in any other form. We know that what many deem their own judgment on daily topics is merely a reflection of what they have read in the newspapers. What reaches them for the first time in to-day's issue soon becomes their belief and knowledge. We had to give them that knowledge to strike a responsive chord.

The press of Ottawa has been most generous with us the past year, and has cheerfully published any matter that we have submitted.

We began our campaign in the newspapers with a good account of the annual meeting and followed up with occasional locals until towards spring.



An Ornamental Lawn.

when a specialty was made of short notes, and concluded with a grand finale of a full page "write-up" of the Society, illustrated with photographs of the Executive, of the special advertising referred to.

Early in the spring we commenced the publication in the press of short, crisp tit-bits, in heavy type, inserted in different parts of the paper, and continued at short intervals until well on in May. I quote two or three of such notices as example:

"Clean up and add to your pleasure and pride in your own house and grounds."

"Nothing looks worse in a fine city prospect than an ill-kept garden or un-kept lawn."

"Your share of beautifying Ottawa lies in your own property. It will add to its value, too, if you clean away the eyesores."

"Work for the cause of a clean and still more beautiful Capital."

Sometimes six or eight such notices were scattered in one issue, until several hundred appeared, so that what was passed over to-day was glanced at to-morrow, read the next day and became the original idea of the reader, thus fulfilling their object in making the people feel that they wanted us more than we wanted them. They prepared the way for the more aggressive work of canvassing, which was carried out untiringly by the Directors, by interested members, and by the Secretary.

During the summer there was a detailed write-up of 260 of the best gardens; also monthly, a full account of each meeting and exhibition with list of prize winners, and occasionally an editorial notice. In all, 65 columns of matter were published in the city newspapers during the year. How did we get the press interested? By showing them that we were in earnest in our efforts to serve the community. As the manager of one newspaper said: "They know a good thing when they see it."

One thousand and ten persons were enrolled as members of the Ottawa Horticultural Society for 1908, an increase of 663 over the previous year. But that increase was not got without a very considerable effort. It meant working, not one day a week, but for actually every day in the week from spring up to the close of the year, and now we start again for 1909. Still it would not have been possible to enroll so many members had it not been that we had a good cause; had we not built up a reputation on the good work of past years; had we not been organized on a sympathetic and business basis; and had we not a Board of Directors, keen, enthusiastic workers. Lastly, we could not have accomplished the work we did this year had the "Horticultural Societies' Act" contained the restrictive clause of the old Act, limiting each Society's grant—and which in effect said—"So far shall you go and no further."

By the elimination of that clause our field of labor is extended; there is an incentive for continued effort and greater activity in the direction of the betterment of living conditions; greater possibilities and probabilities of each in every Society fulfilling its objects and showing some good reason for its existence.

Increase the number of your members, and thus extend your influence, and do your share towards making Ontario the "Flower Garden of our Favored Land."

A. Dickson: What percentage of your members attend your meetings or take active part?

S. Short: About 2,500 people attended the several exhibitions.

J. M. Dickson: What percentage attend the meetings for discussions?

S. Short: 140 to 165. In addition to the lectures we have a flower show in June. A rose show attracts more.

GALT CIVIC IMPROVEMENT.

By J. P. Jaffray, Galt.

Coming from Galt, and representing the Horticultural Association, I may I say I am only an amateur, but as a member of the press, I have taken a deep interest in civic adornment. In 1896 I was secretary of the West Side Association of Chicago, a body of very aggressive men. During that time, I had it pumped into me that the best men in the community are advancing the town in which they live. The result of the work in Chicago has been the erection in Garfield Park, Chicago, of a Horticultural building costing $600,000, perhaps the handsomest building of the kind in America. I moved to Galt in 1906, and I found one of the most picturesque towns I had ever seen. In the meantime, it had grown from a town of 2,000 to 7,000 or 8,000, and it struck me that what was required was a moulding of public opinion along the lines of civic improvement, and I started a campaign there for civic improvement that never ceased. In 1896 they had one small park, more or less of a hay field, used for ball practice. By keeping everlastingly at it, in a few years' time, we added one park to another, and then the people who could afford it became interested, and one result was a splendid gift of 28 acres of wood land and a purchase of 9 acres additional, making what we call Victoria Park, perhaps the most beautiful natural park in Ontario. The play ground is one that the town 's proud of, and every man who has seen it says it is one of the brightest in Ontario. Since then the town has created a public Park Commission. It took three separate and distinct times before the public approved of taking the park management out of the hands of the town council and handing it over to a board of Commissioners. No town council is capable of properly managing parks; it must be put into the hands of a commission. We carried this park commission by-law, and formed a board of management, and the first thing we did was to employ Mr. Todd, of Montreal, the landscape artist, to lay out a complete plan. That gentleman drew out one that was quite costly for a town of our size, but it has been followed almost as closely as possible.

The area of Galt is 1,400 arces. Taking out the water course and the cemetery and public school grounds, leaves about 1,100 acres. We have 123 acres of park land and play grounds, thus 10 per cent. of the area is devoted to play grounds and parks.

Mr. Hutt showed you some views of our park. We have educated the people of Galt to look for a more beautiful city, and one of our great helps has been our Horticultural Society. During the past two years we have more than doubled our membership, but how have we done that? We have the best men in Galt behind us. We do not hold up our organization as a charitable one. We ask them to give us support on the ground of good done to the town. We have ventured out on the kitchen garden proposition, and we have also included three schools. We bought a large number of bulbs and distributed them among the schools, and the results were exhibited at the Horticultural Association during the fall; and a more pleasing sight could not be witnessed than the vegetable market building at Galt at the time of this exhibition, with more than half the school children of the town exhibiting. We have an eye to the future in doing this work. We are educating the children to believe in flower life and beautifying the town and in a few years these boys, and girls will be heart and soul with every organization for improvement. We have in Galt a Beautifying Club, Th

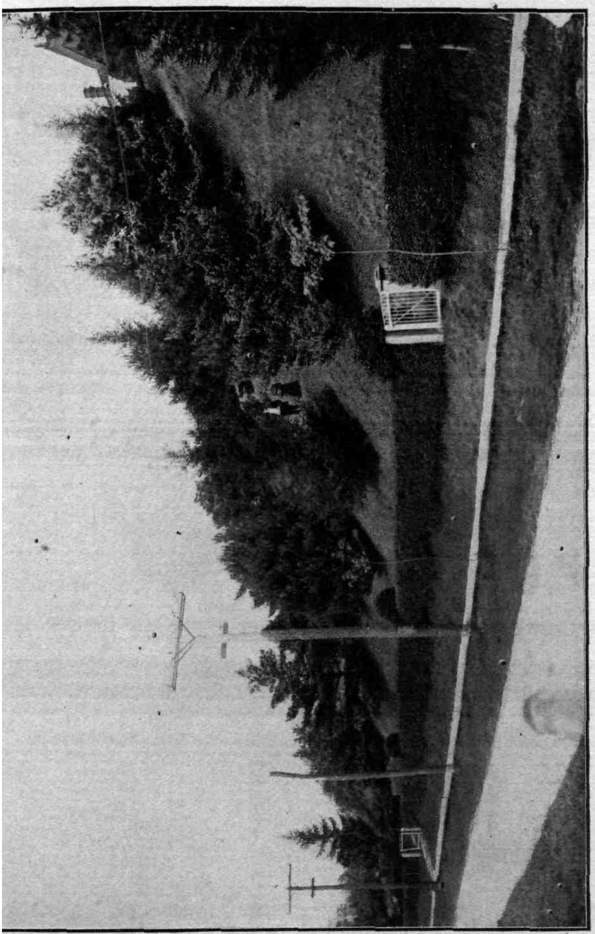
Horticultural Society, The Park Commission, and Local Improvement Committee of the Board of Trade, of which I am chairman.

The Beautifying Club secured Mr. McFarland, and we had a larger attendance than you have here to-day. We had Professor Hutt from Guelph, and we filled Carnegie Hall. Every member of the society was there along with their friends. That is the way we believe in educating the people. We have absolutely no slum district in Galt. We have the bill board nuisance, but we are powerless under the present law to obliterate this. If the Provincial Government will give us power to tax these bill boards out of existence, we will do our share. I am glad you put Mr. Mitchell on the executive; as a newspaper man he will be of great use to his Society. You want to get the members in sympathy with all these organizations, and then you will progress. The wisdom of the country does not live in Toronto or Montreal. If you want an illustration of short-sightedness of a municipality, you want to come to the city of Toronto, where you have a magnificent hall like this built on one block of land, when they had an opportunity to buy a lot of cheap land and secure more ground. I was in Chicago a few weeks ago, and I found they were making play grounds all over the city. You must provide play grounds for the children, and then you can keep the girls and boys off the streets and make better men and women and a better town. I am glad to be here as a member of the press to help the movement along, and I assure you that in the town of Galt we are doing our share to make the Horticultural Association deserve an increased grant from the Government of Ontario.

JNO. CAVERS: In the course of last speaker's remarks he indicated that the substantial men of Galt were behind the Horticultural Society. I suppose from that remark the more wealthy men made some liberal subscription to the fees in the Horticultural Society, am I right in that? About how much fees do they collect from that source?

J. P. JAFFRAY: We are no charity organization. We do not go to any particular man and say we want $10 from you. We simply want their membership, *and every member represents $1. If anyone wants to give a special* prize at a show, well and good. Our membership is for each individual member, we want each man to believe he is getting full value for his money.

J. LOCKIE WILSON: I think the line we take at present is of great importance. I am very much pleased with the addresses of Professor Macoun and Mr. Jaffray who opened the discussion. I am glad to know he is a newspaper man, and takes a proper view of his work as such. I made a suggestion that we should have more newspaper men on the board, and I am glad you took the matter up and elected a newspaper man from the west, in the person of Mr. Mitchell. We shall be watching his paper closely for the next year to see if he will fill the bill as we expect him to. There is no better thing the newspapers of the Province can do than to further the work you are connected with. The press of the city of Toronto may well go down to the capital city of Ottawa and take a lesson from the newspapers there. Last year's reports of our great convention by the newspapers of Toronto were about as meagre as they could be. The reports of our meeting yesterday were, if possible, worse than they were a year ago. What are the reporters doing here? I do not want to find fault with them, because I presume they sent in magnificent reports, but the editors are the men we had better get after. The reporters, I have no doubt, took an interest in the papers and speeches, and had at least a column and a half for the morning editions. The newspaper men in Toronto are behind the times in as far as these important meetings are concerned, which gather in their midst, for



An Ornamental Bank and Hedge.

the uplifting of humanity and the beautifying of the homes of the poorest cotter in the land. Without the assistance of the newspapers we cannot do as much as we should. There is more required of the Directors than attending meetings. You must get home to your societies, and take off your coats and roll up your sleeves. There is a great deal of work for every director to do. It is for you to be up and doing.

"At least not rotting like a weed,
But having sown some generous seed
Fruitful of further thought and deed."

JAS. MITCHELL: I gather from what Messrs. Watson and Jaffray have said that somebody will have to get a move on away up on the shores of Lake Huron. I have two hobbies, that, if I were a man of leisure, I would devote my entire time to for the rest of my life; these are flowers and *neglected children. Some of you, perhaps, may, and some may not, have* tried your local newspaper. Now, I am not speaking for the papers of Toronto. It is an old complaint with regard to them, and they must attend to that themselves. But I may say with regard to the country press, that you will get all the space you want if you will furnish the matter. Of course, I belong to our Horticultural Society, and I look after that fairly well; but stirred up by what I have heard to-day and yesterday, I will take a new grip and I think probably we shall produce some results in the coming year.

Mr. Jaffray says that Galt is the most beautiful town in Canada, Goderich is not nearly so large as Galt, and we have not been at that sort of work so long as they have, but we are not going to take second place if we can help it, in being called the brightest town in Ontario. I want to appeal to every member of the Horticultural Society to enlist the sympathy of your newspaper men, by going to them and saying: "This is no matter of dollars and cents for us. We want you to follow the example of the City of Ottawa," and I venture to say they will do all they can for you. 'It is an easy matter for me to fill up my paper. The problem with me is how to use all that I have every week. If you give the editor matter he is interested in, he will insert it in the paper. We will write about flowers and encourage the children to our hearts' content, and give you what the patent medicine man asks for, "preferred position, top column, and columns along side of reading matter."

H. H. GROFF: I would like to explain the methods that have been in practice in our society. I had the privilege of organizing the first society, under the old Agriculture and Arts Act, with the assistance of that venerble organizer, Mr. Beall, of the Fruit Growers' Association. After several years the Department sent us able speakers. We came to the conclusion that the time had arrived when we should certainly justify our existence in our community as an organization productive of something for the general benefit of the community, and we took up the question of co-operative fruit associations. We brought the best speakers you could supply, with the result that the County of Norfolk, that was not an apple growing section, heads the list at the St. Lawrence arena to-day. Secondly, we have taken up school children's exhibits. We must look to the young as the basis of the material from which we are to secure our future membership, and I have great pleasures in saying that exhibition after exhibition has resulted in an increased quality of the exhibit, and also in greater interest from its educative aspect. Thirdly, the work which we are now taking up is that of improvement to our town. Last year we installed a system of water works, and we are about to commence a campaign for civic improvement.

Miss ROSE: I would just like to corroborate what Mr. Mitchell has said with regard to newspapers. For some time I have been secretary of our Guelph Society, and we wanted the newspapers to publish our reports. They are only too glad to, if you will furnish them with the copy. Our last meeting was a splendid one, and was held in Carnegie Hall, which was three-quarters full. A reporter saw me that day and he said, "Give us a report, Miss Rose." I saw that he got it. We have a long list of school children's prizes and we issued a memorial to the city council for a board of Park commissioners. It was a long report, and it covered two columns or more of our daily newspapers. When I saw it, I said you would think it was the Fat Stock Show. It had been written up with large type at the top, and I felt as proud of it as if I had done it myself. I can speak for the papers that they are only too glad to get matter. But they want it written; they do not want to come and write it themselves.

H. B. COWAN: I feel the newspaper is an important aid in the work. You should see that the local press is fully informed of what is being done. The great success of the Ottawa Society is largely due to the way all three of the city papers have taken hold. Some time ago I was connected with the Hamilton Society. They were organizing an exhibition, and it occurred to some of us that we might get a pretty good report from the newspaper, and we sat down that night and wrote it up. It was predicted by half of the members that it would not be published, but the next day all three papers had a half-column on the front page. The same thing occurred in Toronto. We sat down and wrote up a report the night before. If you wander in about ten o'clock the next day they are so crowded that they cannot get it in; but if you hand it in at the right time, they will co-operate with you. Our experience in Toronto was the same. They had it on the front page in big headings. If you will give them the news, I will guarantee that they will back you up.

G. W. HODGETTS: I want to add a word along this line of newspaper work. I represented the St. Catharines Society, and for a number of years I was President, being elected from year to year. We finally elected a newspaper man, Mr. Burgoyne, and immediately our society sprang into new life. He was incessantly at it, and I think he has a report of the annual meeting before him, in which he gave us five or six columns of his paper showing the work of the last year. A great part of the success of our society is due to what Mr. Burgoyne has done for us in his newspaper.

J. LOCKIE WILSON: I want to correct a statement made by Mr. Cowan about the papers in this city. The press committee in charge here had a typewritten copy, and had that handed to the city newspapers last night before six o'clock.

The PRESIDENT: In closing this discussion, I am only sure that I voice the sentiments of you all, when I say Mr. Watson, although absent, spoke in such strong and inspiring tones, that to him we are indebted, and I trust that the representative here will convey our thanks for the very practical address he has given us.

That address has been supplemented by a most valuable contribution from Mr. Jaffray, who led the discussion. He has two very excellent qualifications. In the first place, he has a spirit of advancement from his intercourse and connection with the great civic movement on the other side of the line. He has brought that over to this Province, and he is showing us that in his own town of Galt great things can be done by the Horticultural Society in improving civic conditions. What Galt has done, every town in the Province can do. Mr. Jaffray has also a great big stick which he knows how to wield upon the civic pride of the citizens of Galt. As editor and

proprietor of *The Galt Reporter*, he certainly has wielded a great influence for good in that community. If we could only get our members to preach six days in the week, and combined with our ministers who preach once a week, it would be a very happy combination in the creating of a higher moral and material prosperity of this country.

J. T. Rose: We have an organization in Brantford that is flourishing, but we have not got the backing we would wish to have, as no doubt our secretary has told you. We are interested in children, that is the strong feature of our society. We distributed from 7,000 to 8,000 packages of seeds in the spring, and in the fall we had our exhibition, and Professor Hutt can tell you what kind of work we are doing.

The President: I have much pleasure in now calling upon Mr. H. H. Groff, of Simcoe, a gentleman who needs no introduction, who is noted all over Europe and America as one of the great hybridizers of this decade.

THE SCIENCE OF PLANT BREEDING.

By H. H. Groff, Simcoe.

The study of the Science of Plant Breeding is one of the most important interests in which it is possible to engage, and its practice is one for which the mind of no man can be too high. Its successful prosecution will tax the greatest powers of observation, patience and persistence, to the limit of the longest life of physical activity, with an ever increasing personal attraction as the years go by.

By means of the practical pursuit of this science, we shall be able to not only increase and improve those products upon which the people of this country must depend for their actual sustinence, but we will so increase them on points of quality, beauty and usefulness, as to make our existence more congenial than heretofore.

By these means not only do we expect to gain by increased productiveness for the labor expended, but with the every increasing demands made by our multiplying populations upon the product of the soil, increased productiveness becomes a necessity, while increased quality and beauty tend to the amelioration of the conditions under which all humanity must exist.

Not only are we able to control and direct those vital forces which carry the desirable qualities which we may choose to select from the numerous species available for our work, but after we have succeeded in producing types of high economic or aesthetic value, by the judicious intercrossing of these, we can bring from the long dormant influences of eons of the past, many of those characteristics that have ceased to exist in the species, and which to-day are only apparent in the genera.

Science is knowledge and knowledge is power. Science is knowledge organized, and this organization is a three-fold process comprising the qualities of observation, generalization and inference.

Observation is by far the most important, and the capacity of the worker for this quality will most materially influence the extent and character of his ultimate success.

Generalization is a condition in which the mind revels during periods of physical inactivity.

Inference is also a mental condition, bearing upon the probability of those truths not yet observed.

Gladioli. Photo by H. H. Groff.

The material upon which you have to work is the product of ages of restrictive influences, tending to the depression of the vital forces which enter into the composition of the form, which may be expected to result in its partial or total disintegration, according to the character of climatic and local conditions.

For the purpose of classification this material is described in extended sections bearing similar characteristics, as genera, which are again divided into species, the wild types of all plant forms, which constitute the base of our efforts to bring their hybrid progeny into subservience for the use of mankind.

Having studied the individual peculiarities of the species we have gathered from all parts of the world forming their natural habitat, and having studied the effect of the influences of our light, heat and the whole course of temperature, the soil and its chemical and physical properties, moisture supply and food material, we may consider ourselves as supplied with a laboratory stock, on the judicious blending of which, coupled with the possible extent of our physical activity, depend the ultimate results in pleasure and material satisfaction.

The fact that important scientific discoveries have been made by men who have had little or no early theoretical training, is sufficient encouragement to workers of critical and practical temperament, to pursue their investigations on independent lines of thought with the assurance of some measure of success, and while such training is not to be decried, there are occasions when its absence finds the mind more free for development on special lines, with the possibility of securing phenomenal and valuable results. You learn from the open book of Nature, and the University learns from you.

This is an age of hybrids, and the limit of our activity is the only limit to be placed upon the possibilities available from the exercise of the science of breeding.

I will ask you to mentally glance across this continent and consider the changes wrought by untrammeled human intelligence within the memory of many here present. A wilderness has given place to the most advanced products of hybridity, both plant and animal, and results impossible in the old world (so called) are our heritage to-day.

The hybrid man has swept over its surface and practically exterminated the wild species of the human race. The wild animal species have been replaced by domestic hybrid types, from which select breeding is developing material adaptable to their changed conditions and more useful to mankind, with the tide of all our products, plant, animal and man, turning back upon old world civilization with powerful influence, both mental and physical.

The unfettered intelligence of man has bridged the ages, and in hastening evolution by hybridization, has rushed into the eons of the future and laid their treasures at our feet.

As already stated, hybridization means a blending of certain chemical constituents in the form, the harmonious co-occupation of which is not to be expected beyond the location in which they have attained apparent fixity, but this is true of species as well, in fact it is the influence of restricted environment for ages that has separated them into the series of groups we call species.

With the knowledge of this instability of the form as the result of hybridization, we may turn the tendency to general advantage and usefulness by infusing the blood of every adaptable species into the product of our work, thereby covering the greatest possible radius of inherent capacity for acclimatization, handed to us from the ages of diverse local and climatic isolation that have made them the individual types that we know them to be.

Photo by H. H. Groff.

A Pretty Maid Admiring the Expanding Bloom.

To such an extent has it been possible to control the desired qualities, that my latest composite hybrids have produced fully 95 per cent. true to color, with over 75 per cent. carrying characteristics of such value as to make them worthy of retention. These features coupled with increased adaptability to changed conditions, make for the success which it is our desire to attain.

The indirect influence of this blending of vital forces in the individual product, is not the only advantage to be gained by the practice of our science, for hybridization induces sporting or bud variation, which may appear after years of apparent fixity, at such time as the chemical composition of the form is disturbed by some change in local conditions, and a new combination takes place and becomes a distinct force to find an outlet in some bud, and a new birth is the result, which is capable of multiplication by cuttings or grafting.

The most remarkable case of variation occurring in my experiences on the lines of bud variation or sporting, came from a named variety of European origin that had been multiplied in quantity, and grown by me for some years, with every appearance of having become a fixed type.

The ground color of the normal flowers was a vivid scarlet. In one season those of a single plant changed to a rich cerise, in the upper half of each floret only. The corm was reserved for special observation the following season, at which time the whole flower assumed the new color without change in any other markings or characteristics.

This new type thus became a distinct variety of such definite character as to not only perpetuate itself by multiplication, but to impress the new color upon its progeny in seed raising, with such force that the peculiar shades of acquired color permitted modification by means of an infusion of light blood, as well as intensification by means of a darker cross made for this purpose.

The practical and general application of my system may be outlined as follows: In order to secure the benefits of existing material, make crosses between every available type, regardless of apparent objectionable characteristics.

Select sires from these and use on every wild species obtainable, on special and general lines—crossing and recrossing until desirable types are produced. Do not use the wild species as sires, after first line cross.

Then bring the selected offspring of all wild species together in intercrossing on special lines, as each wild species will prove more useful than another in some individual feature valued by us, for as already indicated by me specialization becomes imperative.

The result of the foregoing will be, the creation of new domestic specific types, valuable as sires for use in revitalizing crosses on existing varieties of merit, and the production of new forms and types of unexpected quality and value.

For example, if the desire is to produce a white section, every effort should be made to originate such colors and shades from every known wild species, without regard to their colors. When fixed types of a desirable character have been so produced, these should be used as sires on selections from existing varieties as mothers, for the creation of new and valuable economic types.

While the foregoing operation is progressing for the production of commercial types, crosses should be made between all of these sires on individuals prepared for use as mothers by removal of the anthers before ripening of the pollen, with the object of creating new and distinct domestic specific

"Aren't They Pretty?" Photo by H. H. Groff.

types to be used as the progenitors of new forms and races, as well as for the revitalization of strains possessing valuable characteristics worthy of perpetuation and elaboration.

The results to be obtained from blending vital forces that have been isolated for ages in the natural production of wild species, give unbounded satisfaction, and the pleasant surprises are only limited by the activity of the worker.

While I might multiply illustrations with many valuable lessons on every point of interest to plant breeders, as it is to these that this is addressed, I will bring the point forcibly home to them by two examples. Would we expect to see the intelligent horse breeder of to-day go back for sires to the many toed type of the miocene period, were this possible; or even to existing "wild" species?

It was my privilege recently to admire a picture illustrating with artistic skill a most advanced human type of physical and intellectual beauty, a female form of such exceeding loveliness and perfection as to hold the gazer spellbound by its revelation of divine quality, while the portrayal of intellectual development and purity was so forceful and compelling as to grasp the very soul and lift it from its earthly surroundings to a position of silent and inexpressible admiration and reverence. This picture was entitled "An Heiress of the Ages." Would we expect her to advance to greater triumphs of perfection and beauty by an alliance with some of the semi-anthropoid types of early human development, or even with well known "wild" species of the present day?

Among many interesting experiences resulting from the intercrossing already referred to, a spike of bloom with the flowers on one side red, and on the other white, although a result to be expected, proved attractive to amateur visitors.

A most interesting section has developed, with spikes that twist and twine like a vine, a tendency handed down from past ages. As a vase flower this type presents a most attractive appearance, a four-inch vase full making a bouquet two feet in diameter.

The potency of the vital influence tending to produce semi-double flowers, also made itself manifest in the production of twin corms from single seeds. This effect is one of great scientific interest.

It is now twenty years since I began my work on the improvement of the gladiolus, but the first half only is known commercially. When the product of the past ten years is ready for dissemination, it will assure even greater satisfaction than that preceeding it.

On first offering my productions for sale, the invariable request was "send no reds." To-day I cannot supply the demand for this shade, and have refused $10 for a single corm of a red that is not yet increased in sufficient quantity to offer. In no other section has a variety attracted equal attention.

In the United States, where the field is so much larger than in Canada, my representative grows 10 acres, the largest acreage of high quality in the world.

The variety named "America" was distributed by me for years in collections, before it was multiplied and so named. It was used for the decoration of the yacht "Mayflower" for the Japan-Russia Peace Conference, and although only of average quality according to my standard, is admitted to be the best variety listed by the introducer under its present name.

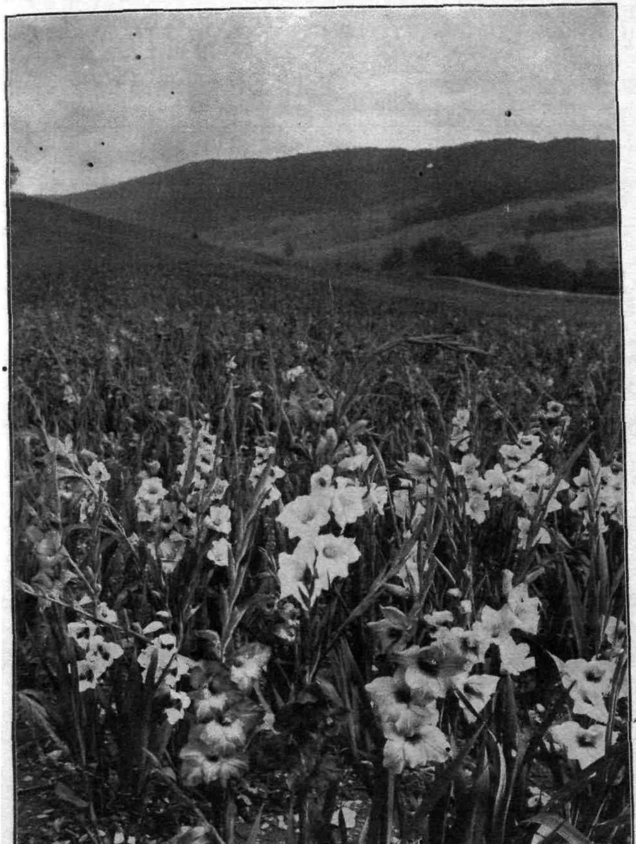


Photo by H. H. Groff.

A Field of Gladioli.

My method of free dissemination of high quality types has always been objected to by the commercial advocates of the naming system, but it is upon this foundation that the popularity of my introductions is built, for it is by this means that the amateur has gained present knowledge and satisfaction.

Time has justified my faith in the ultimate appreciation of the intelligent grower. In 1904, that beautiful publication, "Country Life in America," gave my work a five page illustrated write-up, and gave me all deserved honor and credit, but in referring to my popular system of dissemination they said, "One man cannot stem the tide of a century of horticultural usage." Yet, in 1908, that popular and influential journal, "The Field," of London, England, in a lengthy editorial on the gladiolus, devoted practically the whole of its personal reference to my work. It stated "That not only had Mr. Groff improved the quality and variety of the flowers, but he has reduced the price to at least one-tenth of that charged a few years ago."

I cannot close without reference to my Pure White Cocker Spaniels, the only strain of the kind in the world, and a perfect example of mutation, which, like sporting, is a product of hybridization.

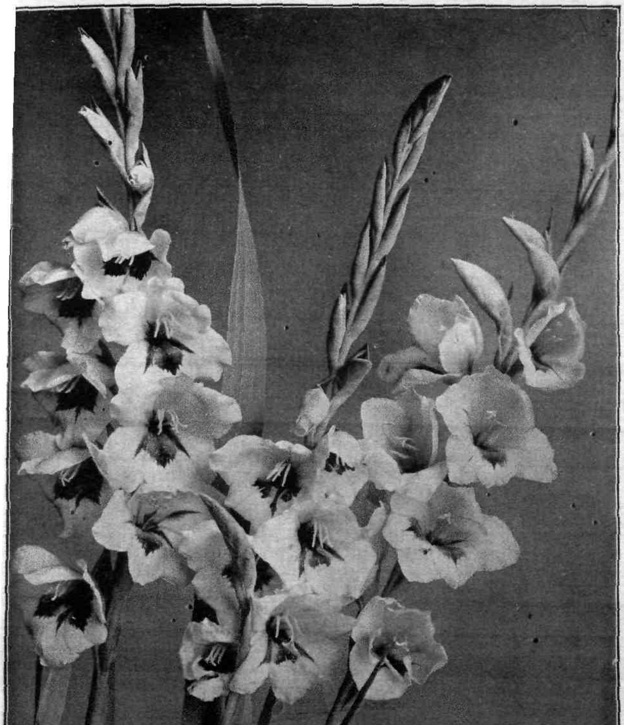
Three years ago, the "Sporting and Dramatic News," of London, Eng., were pleased to publish a photo and description of the first dog of the type. But they added with caution, "The type is not likely to become fixed." In 1908, on receiving a photo of a trio of these beautiful animals, they promptly copyrighted it for their publication.

You will, therefore, see by the foregoing experiences, that it is hardly safe to prophesy what we in Canada may not do. The value of such original work is beyond estimate for the illustration of the possibilities of our country, and its successful development is bound to exert a powerful though subtle influence for Canada and the Empire.

JAS. MITCHELL: I have talked with Americans, I fancy all of you have. How proud they are of that wonderful man in California, Luther Burbank, who has done very much along scientific lines. I have known Mr. Groff for a year or two, and I am going away from this meeting with as much pride for our Groff as any American can have for their Burbank. I think, one of the good things that will result from this gathering will be the popularity of that paper. Regarding the gladioli, we in Goderich last spring distributed some of Mr. Groff's Hybrids to our members, and one of the things of which we were all proud in Goderich was the marvellous beauty and the immense variety of bloom we had. I had such a bloom of gladioli that I wished Prof. Hutt had been up there at that time instead of in March. If you want to find something that will give you unbounded satisfaction and pleasure try some of these. When he was speaking of some of these varieties he had, I almost thought I had some of these fine specimens in our town. It has been one of the things that stimulated renewed interest in our society, and we hope that it is going to pay us handsomely for the expenditure.

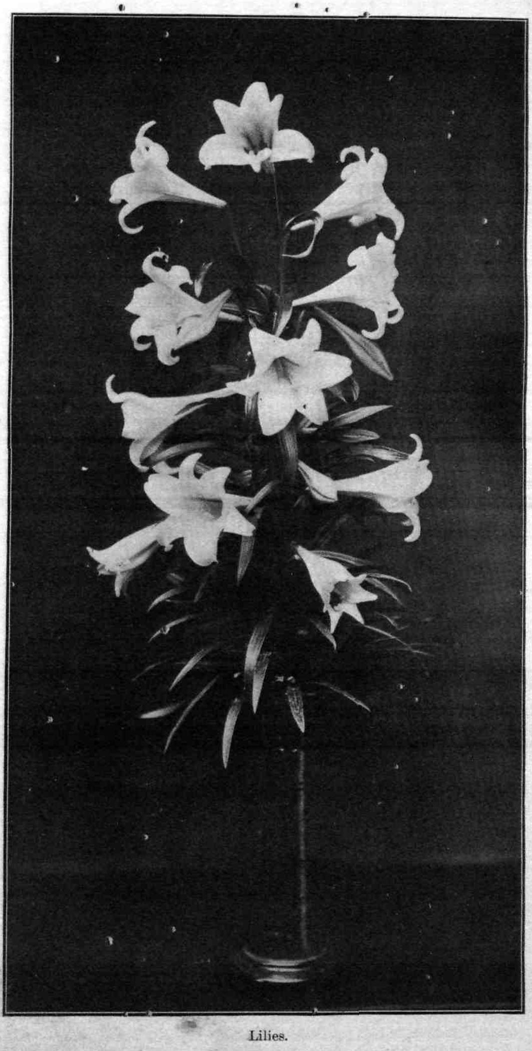
H. H. GROFF: Mr. Burbank worked on my specialities for some years, and I was fortunate enough to buy out the result of his twelve years' work some time ago, although that was of no commercial value. At the same time I had the pleasure of securing them. In regard to the question of distribution, I do not sell. The distribution is all done by those who grow the product they get from me.

The PRESIDENT: I am sure every Canadian Horticulturist is indebted to Mr. Groff for his very interesting paper, and we regard him as as the magician of Simcoe.



Gladioli.

Photo by H. H. Groff.



Lilies.

SUPPLEMENTARY REPORT OF DIRECTORS.

The Secretary then presented the supplementary report of the Directors.

J. LOCKIE WILSON: The Board of Directors at a short meeting, decided to affiliate with the American Civic Association, and we recommend very strongly the societies in the different parts of the Province to do likewise. They can do so by the payment of a fee of $5. This association has a valuable fund of literature, and every society that becomes affiliated will secure copies. We also dealt with the question that appeared in Prof. Hutt's address with regard to the chairmen of the seven different committees. Some excellent names have been suggested for these positions, and it was proposed that a committee be appointed composed of the President, Secretary and Prof. Hutt to make suitable arrangements for this new departure. It was decided to appoint Prof. Hutt and your secretary as the delegates to the convention at Pittsburgh.

The supplementary report of the Board of Directors was adopted.

IN MEMORIAM—JAMES FLETCHER.

A. ALEXANDER: The duty falls upon me to refer to the death of Dr. James Fletcher of Ottawa. Some of our societies have known him for many years. We in Hamilton not only learned to know him, but to love him. When Dr. Fletcher stood up to speak on a horticultural subject he not only said what was perfectly true according to the facts, and relations of these flowers, but you felt that the intensity of his love for nature, and especially for flowers, was honest and true to the very core as he was himself. I speak so feelingly because he was once or twice a guest at our home, and the whole family felt that they had an interest in him. It was only a few days ago that my daughter happened to be on the railway platform at Laggan, in the Rocky Mountains, and the only passenger who got off while she got in was Dr. Fletcher, and on the way back she and Miss Laut, the authoress, happened to call at Ottawa, and Dr. Fletcher sent a very kindly message to me at that time. He gave inspiration to a love for flowers and the cultivation of them.

It is with the deepest sympathy I rise to ask that the secretary of the association be requested to draft a letter of condolence, as a mark of the esteem in which he was held by the members of our association, and that the same be forwarded to his widow and family.

I cannot trust myself to say more, because I feel towards him as if he were a brother, and more intensely because the biggest hall in our city would be filled whenever he came, and we would always be delighted with the inspirations we got.

R. B. WHYTE: I concur in all that Mr. Alexander has said with regard to our friend. I knew him for thirty-five years. We were close friends, and it was a great shock when I heard that we had lost him. I most heartily agree with all Mr. Alexander has said, and I hope our secretary will express the grief we all feel for the loss of such a zealous friend as Dr. James Fletcher.

A MEMBER: Dr. Fletcher's loss will be one that it will be almost impossible to replace. He had a happy knack of imparting his knowledge to an audience in a very pleasing manner. He popularized his Horticultural and Entomological subjects as no other man I have heard has done. When he came to our city, we nearly always made a point of getting a day off, to spend

in the woods together, and he always left us carrying our very best wishes. It is a very sad duty we have to perform in paying a small tribute to a good man who has gone before.

Prof. MACOUN: Coming so lately as I have done from Dr. Fletcher's grave, it is very difficult for me to say anything. Mr. Alexander spoke of him being a brother. Dr. Fletcher has been to me almost a father for the last twenty-five years, and I shall miss him very much. My feelings prevent me from saying anything more, because we feel his loss very badly.

The PRESIDENT: It is a very sad duty that we have to perform in regard to this memorial tribute to one whose loss is irreparable to this country. To know Dr. Fletcher was to love him. It was only necessary to come into his presence a few moments to recognize his true gentility. At the same time he was a most earnest seeker after truth, and had that marvelous faculty of imparting it.

REPORT OF COMMITTEE ON PLANT NOMENCLATURE.

Your Committee on plant nomenclature, appointed at the last annual meeting of this association, begs to make the following report: Your committee met for organization on January 31, 1908, in Manning Chambers, Toronto. Those present were Messrs. W. T. Macoun, J. Cavers, Wm. Hunt and H. B. Cowan. Mr. Hunt was elected chairman and Mr. Cavers secretary. Two other meetings have been held since that date, at which all members were present.

Early in its deliberations your committee felt that its possibility of doing effective work would be greatly increased were its membership extended by the addition of representatives from the Ontario Vegetable Growers' Association and from the Canadian Horticultural Association. Your committee, therefore assumed the responsibility of inviting these two associations to appoint representatives to act on this committee. We are pleased to report that both organizations considered the matter favorably. The Ontario Vegetable Growers' Association appointed Mr. T. Delworth, of Weston and the Canadian Horticultural Association, Mr. Walter Wilshire, of Eglinton. Your committee trusts that their action in this matter will be endorsed at this convention.

Our efforts have been confined to the procuring of information on the matter of nomenclature of plants. With this object in view, the secretary was instructed early in the year to correspond with a number of prominent horticulturists in England and in the United States. Nearly all those addressed have written courteous and full and explicit replies to the enquiries made, and the committee beg to acknowledge the courtesy of these correspondents as expressed in their letters.

The following is a summary of the chief points made by several correspondents: Wilhelm Miller, editor of the "*Garden Magazine*," says, "What we want is a uniform set of rules of changes in nomenclature whenever novelties are introduced or whenever new facts about old forms have been discovered. People who have trade interests in names fear that registration would, by reducing their novelties to synonyms of old varieties, cause them financial loss. In others, most tradesmen are afraid of uniform nomenclature because they think the object is to control trade, whereas the only basis upon which uniform nomenclature can be achieved is one in which scientific record is the dominant thought. To meet the objections of such tradesmen he would permit the introducers of "novelties" to express, in their catalogues, dissent from the judgment of any authority that might

be set up, because time determines the real merits of horticultural novelties and the important thing is to keep the records." He suggests that annual supplements to Bailey's Cyclopedia of American Horticulture, these supplements to be succeeded every ten years by a cumulative index of all the new varieties and species introduced since the publication of the original work, would be desirable; but he does not see that such is practicable.

Mr. W. N. Rudd, secretary of the S.A.F.O.H., writes; "The relations between Canadian and United States plantsmen are so close and the traffic between them so much greater than with other countries that it would be a most excellent thing to have the same standard adopted in both countries."

B. T. Galloway, Chief of the Bureau of Plant Industry, Department of Agriculture, Washington, D.C., thinks that the nomenclature of species of plants as found in Bailey's Cyclopedia is preferable to that found in any other comprehensive work for the following reasons: (1) The species are considered primarily as cultivated plants, and the modifications that have resulted from cultivation are recognized. In Index Kewensis, the plants are treated chiefly from the standpoint of the systematic botanist; (2) The number of species treated by Bailey is much larger and more comprehensive than in any other cultural treatise, and includes substantially all the horticultural plants grown in North America. Nicholson's work lacks many species that are important in American horticulture; (3) Few names that have become firmly established in horticultural literature, including trade publications, have been changed, and all names that have synonyms are arranged to readily show the old and new names. Mr. Galloway recognizes that there are difficulties in the way of plant registration, especially in the case of annuals and other plants commonly perpetuated from seeds; but adds: "Provision for registration of varietal names conformed to an adequate and workable code of horticultural nomenclature accompanied by an account of origin and history and as accurate a description of the plant as possible, including statement of the locality and conditions under which it was grown, might tend to reduce the existing confusion and solve some of the present difficulties. Whether provision for legal or governmental registration of such names would be practicable at this time, I am not sure, though eventually that may be the best solution of the matter." He concludes by saying that the whole question should be much easier of solution on this continent than in Europe, because of the close professional and trade relations and the common language of Canada and the United States.

The Director of the Royal Botanic Gardens at Kew draws attention to the Botanic Congresses that are being held every five years—the first having been held at Paris in 1900, the second at Vienna in 1905, while the third will be held in Brussels in 1910. The Director believes that the code of rules adopted by these Congresses should be the standard of nomenclature of all divisions of plants down to and including species, and that the Index Kewensis with its periodical supplements furnishes the best registration of species extant.

The Secretary of the Royal Horticultural Society, (England), writes: "A systematized nomenclature of plants, and by an organized body, is not merely highly desirable, but is a practical necessity at the present day, by reason of the enormous multiplication of varieties, and the raising of new hybrids, by the constantly increasing number of expert horticulturists." "The main work of developing horticulture in our country now falls to the lot of this Society, (a society maintained by Fellows' subscriptions, and lacking any Government support." "The special flower societies look to us as a parent society." "We have a system of registration." He adds that the society has a garden in which tests of certain plants are made each year, in

order to weed out weak and undesirable varieties; and that in the case of plants promoted by a special society such tests are carried on by joint action with each one. As, for instance, Dahlias were tested this year in joint action with the National Dahlia Society. The registration of new species, hybrids, and varieties of plants and the results of these tests on well known varieties are published in the Journal of the Society. Periodically these registered results are collated, revised, and re-issued, each kind of flower or vegetable or fruit, with its respective varieties, being kept by itself. The Secretary concludes, "The 'Kew Guides,' provided the latest editions are used, are a good guide to the nomenclature of garden plants so far as species and the commoner hybrids are concerned, and are from time to time revised and brought up to date. For hybrid Orchids, probably the most complete list is that in Sanders' Orchid Guide."

Mr. Cameron, a member of your committee, has furnished an interesting and comprehensive letter on the subject under consideration. He suggests the establishing of an Experiment Station on botanical lines, describes the physical features of such a station, and characterizes the sort of man who should manage as well as the sort of men who should be helpers in such an institution. Mr. Cameron writes: "An immense benefit would be derived by a good system of registration, a revision of our lists, based along the most natural lines, and a simplifying of our flora, both indigenous and hardy exotic. That such a revision in nomenclature of plants is needed, no one of a practical turn of mind would question."

Your committee beg to direct attention here to the fact that there are two prominent features in this problem of nomenclature, the scientific and the commercial. The scientific features cover all divisions of plants; the commercial covers only species and varieties, and it should be based on the scientific. So far as the scientific phases of horticulture are concerned, it may be taken for granted that the reports of the Botanic Congresses that have been already referred to in this report, furnish a code of rules for the nomenclature of all divisions of plants down to and including species, since these reports have been very generally received the world over as authoritative. The report of the Vienna Congress of 1905 was given in full in "*Rhodora*" of March, 1907. The following is a brief summary of it:

"This Congress was the result of conferences of botanists held in Paris in 1900. A bureau composed of forty-seven botanists, representing all the most important countries of the world, was then formed, to organize an International Congress to be held in Vienna in 1905. At this Congress between 500 and 600 botanists attended, and the sessions lasted for a week. The time of the Congress was almost entirely taken up with the question of nomenclature. It was early agreed that the basis for the formation of any new code of rules should be the Paris code of 1867, sometimes called the De Candollean Code. The report shows that there was nothing radical, much less revolutionary, in the deliberations of the Congress. Certain principles were adopted; rules based on these principles were enacted and rcommendations on secondary points were made. What was aimed at was the formulating of a regular system of nomenclature that would be recognized and used by the great majority of naturalists in all countries; a system that would correct most of the errors that have come down to us from the past, and which would prevent the making of similar errors in the future. It is evident that such a system must deal carefully with the existing conditions, even although there may be many cases in conflict with the principles and rules adopted. That this care was taken by the Congress, is shown by the fact that a list of nearly 400 generic names of plants is retained, although

Photo by J. S. Pearce.

Victoria Park, London.

these do not conform to the fundamental principles of priority. It was agreed that the rules should be adhered to from and after the first day of January of this year."

While the report of the Congress has been very generally accepted, officially and unofficially, by the leading botanical establishments of the world, it is only fair to say that an important group of American botanists have declined to accept this list of exceptions, and are continuing to use the oldest generic names.

The following are some of the leading principles adopted by the Congress: Fixity of names; avoidance or rejection of forms and names, which may cause error or ambiguity, or throw science into confusion; avoidance of the useless creation of names; no custom contrary to rule, if it leads to eror, or confusion, can be upheld; scientific names are in Latin; every individual plant belongs to a species; every species to a genus; every genus to a family; every family to an order; every order to a class; every class to a division. In many species, varieties and forms are distinguished; each natural group of plants can bear in science only one valid designation, namely, the oldest, provided that it is in conformity to the rules of nomenclature.

The following are a few of the rules: ' Botanical nomenclature begins with the Species Plantarum of Linnæus, Ed. I (1753), for all groups of vascular plants; to avoid disadvantageous changes in nomenclature of genera by the strict application of the rules, a list of exceptions, already referred to, is provided; these names are chosen from those that have been in use for fifty years after their publication, or which have been used in important published papers up to 1890. Then follow rules for the systematic naming of divisions, classes, orders and families; divisions and classes being generally named from one of their characters; orders receive names from one of their principal families with the affix *ales*. Families are designated by one of their principal genera with the affix *aceæ*. Genera receive their names from any source; these are substantives in the singular number and written with a capital letter and may be compared to our family names. Examples are, Rosa, Convolvulus, Gloriosa. Species are designated by the genus to which they belong, followed by a specific name or epithet, such as, Papaver Rhœas, Geranium Robertianum.

As to publication: Publication is effected by the sale or public distribution of printed matter, or indellible autographs; communication of new names at a public meeting, or the placing of names in collections, or gardens open to the public, do not constitute publication. On and after January 1, 1908, the publication of names of new groups of plants will be valid only when they are accompanied by a Latin diagnosis; the rules of botanical nomenclature can only be modified by competent persons at an international congress, convened for the express purpose.

The following are some of the recommendations: The specific name should, in general, give some indication of the appearance, the character, the origin, the history, or the properties of the species. Specific names begin with a small letter, except those which are taken from names of persons, or those which are taken from generic names. When the specific name is taken from the name of a man, it is formed in the following way: When the name ends in a vowel, the letter i is added, except when the name ends in a, when e is added; when the name ends in a consonant the letters ii are added, except when the word ends in er when i is added.

As to publication: Not to publish a name without clearly indicating whether it is the name of a family, or a tribe; a genus or a section; a species,

or a variety; to publish simultaneously with a new name, the Latin diagnosis, which will make the name valid from the point of view of scientific nomenclature. Authors' names, put after names of plants are abbreviated, unless they are very short. Botanists should use in modern languages Latin scientific names, or those immediately derived from them. The metric system only is used in botany for reckoning weights and measures. Temperatures are expressed in degrees of the centigrade thermometer of Celsius.

Your committee has the pleasure to announce that Prof. W. T. Macoun has completed his bulletin of 2,000 herbaceous perennials growing in the Botanical Gardens at Ottawa under his charge. This bulletin is now in the press and will shortly be ready for distribution. Mr. Cameron has also a list of some 2,000 trees, shrubs, and plants planted by him in the Queen Victoria Niagara Falls Park during the past twenty-one years, which list it is hoped will become the property of the Ontario Government. These two lists are especially valuable, inasmuch as they contain correct descriptions of the plants named, as well as having the names scientifically accurate. Prof. Macoun's bulletin forms an excellent beginning of the work required for correct nomenclature of plants.

Your committee has performed a small piece of practical work in the preparation of short lists of Per. Phlox, Dahlias, Gladioli, and Irises, which lists are incomplete and will be passed on to the committee of 1909 to be elaborated and completed.

In conclusion, your committee begs to state that as a result of its deliberations, it is convinced that there is a great field for work in the matter of securing proper and reliable information relating to plant nomenclature, and would recommend that this committee be continued in existence with such changes in its personnel as this convention may deem wise, and that this committee be given power to add to its numbers.

All of which is respectfully submitted, signed on behalf of the committee.

WM. HUNT, Chairman.
J. CAVERS, Secretary.

A. ALEXANDER:—The report is very extensive, and from a botanic point of view very valuable. It is important that that subject should be before us as a Convention, but unless my memory is deceptive, that is not what the committee was appointed for. Our trouble as importers, and as men sending to the other side to nurseries for plants was (and this is what gave rise to the appointing of a committee), that we got plants with new names taken from their catalogues, and we find they are identically what we have had before. The difference between species or varieties or families never entered into our mind, but our difficulties were that plants came from nursery men with different names, and yet they were the same plant. My idea was, that they were to correspond with nursery men of repute, so that importers could be sure they got what they ordered. I got Perennial Phlox, sixty-four varieties, and when I grew them, and they came into bloom, I found I had been growing for twenty-five years under a different name three of the varieties that were said to be new. There is a well-known Phlox Lafalle. I got two of these under different names, French name and German name, identically the same. It was that trouble which gave rise to the appointment of this committee. I feel grateful for the labor gone to in getting up that report, but I say that it does not cover the point that we appointed them for.

PROF MACOUN:—It was well understood that the point brought up by Mr. Alexander was one of the principal ones to be taken up.

J. M. DICKSON:—I agree with Mr. Alexander. It was not mechanical nomenclature. Any man who understands plants will understand names. I did not expect they were going to do that kind of work. As Mr. Alexander says, these men are talking about varieties. We will take a catalogue with seven hundred Peonies in it. Will you have to describe them all in long Latin terms? All we want is when you buy Phlox called "Miss Lingard" from one dealer and "Snow" from another, you should know that the two are identical. There are thousands and thousands of varieties, and the difference is so slight that it would require an expert to differentiate.

JNO. CAVERS:—I fear Messrs. Alexander and Dixon have been expecting too much for the first year's work. Our idea is that if we get down to a commercial list in a few of the leading species of plants in ten years from now, the Nomenclature Committee would be doing excellent work. The Royal Society in England have a garden, and in 1908 the authorities of that organization in conjunction with the Dublin society were testing Dahlias and weeding out inferior varieties. I think that furnishes a suggestion for a line of work.

The report of the Committee on Nomenclature was then adopted.

W. B. BURGOYNE:—I move that the Committee on Nomenclature be reappointed, with the addition of Mr. J. Lockie Wilson, and that the Department of Agriculture be requested to arrange to have the comprehensive list of trees, plants and perennial shrubs compiled by Mr. R. Cameron, published with the annual report of this association as an appendix. Carried.

TUB PLANTS.

BY RODERICK CAMERON, TORONTO.

The subject selected by the committee for me is a large, varied, and very difficult one, viz: "Tub or Half Hardy Plants, their Usefulness and the Care of them during the Winter."

The number of plants that could be classified under this heading is legion, but I only intend to draw attention to a few which I consider the best or most useful that I have had to do with, and that I am making arrangements for at the present time to have planted round this building next summer.

All will admit that the grounds round this City Hall look very bare without a tree, shrub, or vine. It reminds one of a ship without a sail, or a bird without wings, although the building itself is a model of architectural skill.

As stated already, to compensate for the lack of the above trees and shrubs, I propose to plant the grounds with the half hardy tub plants; the name of such gardening we will call changeable gardening for convenience, since it permits a change of position and plants at the will of the gardener.

There may be an objection raised by some to such plants being used as they are of a formal character, but here the grounds, steps and terraces permit of such plants being used, and much depends on how they are placed. There are other reasons why this should be the style of gardening in such places, first the grounds are small in area, they are centrally located in the midst of dust, smoke, and poisonous gases, where no hardy evergreen could live; hence our reason for this style of gardening in such cases, where change of variety and location will require taste and good judgment.

The variety of plants best suited for such purpose are as follows: Buxus or Tree Box. They can be got in about a dozen varieties, green, golden, and silver leaved, large and small leaved, standard and pyramidal forms.

The Enonymus Japonicus as evergreen bushes can be got in many varieties, green, golden and silver leaved, beautifully marked and of first quality.

The Acuba·Japonica, like the Enonymus, can also be got in several varieties and beautiful markings, and there is no plant grown that will stand soot, gases, and dust better. The acubas are the plants that are so much used in vases, etc., in the smoky cities in the old world, where little else will grow but them and the Ivy. While on the ivy, let me say, that if the different varieties were trained in pyramidal form on wire frames, especially the variegated forms, there are few plants that can surpass them in beauty.

The Laurus nobilis is probably used for this purpose in America more than any other plant, and these sweet Bays can be procured in standard and pyramidal forms, their dark green prim form claiming for them a place for all decorations in church, cemetery or hall.

The Nerium, Oleander, can be used to good effect in the angles of buildings, and along with them may be planted the Eleagnus pungens, which can be got in different varieties of variegation, green, silver and gold.

Large plants of Carioptris mastacanthus can be used to good advantage in corners along the paths. This plant and the chaste shrub or Vitax Agnus castus are two of the latest to bloom, and both are much admired for their fragrance.

Here and there among such plants, but separate from them on the lawn, may be placed Hydrangeas hortensis in several varieties to give some bloom to the whole setting.

Catalpa Bungei is quite hardy, and when good heads are formed they look quite conspicuous when grafted as standards.

Ulmus parvifolia is also hardy, and will make excellent standard round-headed plants.

Yucca gloriosa and allœfolia should be used in such planting which would tend to give a more tropical effect.

Abelia florabunda and variety grandiflora make excellent tub plants, and bloom all summer if kept in cold storage all winter.

Thyoptis dolabrada and its variegated form should also be employed in such planting, since they are evergreens of the choicest quality.

I have now come to the end of my choicest varieties, and their names in full and some other varieties I will list at the end of this paper.

We have been mentioning the above as tub plants, but tubs at their best look out of place, are expensive, and require constant care, watering, etc. In place of tubs I use baskets made of half inch mesh chicken netting; they can be made by any handy man. Line the same with moss or thin, tough sods, place the plant, and fill up tightly with soil, water well by dipping, and they are ready to be planted where wanted, like planting a tree with a ball of soil attached to it. It will be seen that by adopting this method the plants can be lifted in the fall without disturbing the roots, they will require no care with water, etc., from the time they are planted until they are taken up again in the fall.

I will now try and explain my method of storage for the winter. I built a cold storage pit, a hole dug in the ground twenty-five feet by fifty, and ten feet deep. Against the soil there was a wall built of concrete all round except a space for a door through which to take plants in and out. This wall was built up to the surface of the ground, and joists thrown across every two feet; on top of this was built a green house roof, bars fastened to a ridge pole; the bars were made to hold glass on both sides with air space between. At the ends was left a space for a small door to act for an entrance to the loft above, to give air and let out excess of moisture. In the bottom of this cellar was

placed from two to three feet of good loam soil, and a month before planting this was saturated with water, or rather a month before the danger of severe frost. When it became dangerous to leave the plants out any longer, they were collected and planted in the soil in the aforesaid cellar, baskets, and all, the same as they were out of doors. In this position, again the plants get no water until they go out next spring, the moisture in the soil being sufficient. The joists overhead in this cellar are used to run rolls of tar paper along when the temperature reaches zero outdoors; when fifteen degrees below zero, I had seventeen degrees of frost in the cellar. Here lies the secret to success, while the plants and soil are frozen keep them dark; as soon as the frost is gone give them the light again. I have taken such plants out in zero weather in an open waggon to decorate without any apparent harm to them.

The following is a full list of the plants that may be used for a changeable garden, and will do well in such a cellar as I have just described:

Yucca gloriosa, Yucca allœfolia, (variegated), Nerium Oleander, Abelia florabunda, Abelia grandiflora, Thyoptis dolabrada, Thyoptis dolabrada variegata, Hydrangea hortensis, Hydrangea Hortensis, var. Thos. Hogg. Hydrangea Hortensis variegata. Eleagnus pungens aurea maculata. Eleagnus pungens Fredriki variegata. Eleagnus pungens variegata. Eleagnus pungens macrophylla. Careoptris mastacanthus. Vitax agnus, castus. Buxus sempervirens arborescens. Buxus sempervirens variety pendola. Buxus sempervirens Aureus. Buxus sempervirens Aureus Marginatus. Buxus sempervirens Aureus Argentia. Buxus sempervirens Macrophylla rotundifolia. Buxus sempervirens Handsworthi. Buxus sempervirens Pyramidalis Var iegata. Enonymus Japonicus, Enonymus Japonicus aureus, Enenymus Japonicus Macrophyllus. Enonymus Japonicus medio-pictus. Enonymus Japonicus alba marginatus. Enonymus argentius variegatus. Enonymus Japonicus aureus variegatus.

Prof. HUTT: Had you any difficulty with the roots getting behind the wire netting?

R. CAMERON: No. The baskets cost five cents apiece. Any person with a good pair of shears can make one. It only costs you five cents more to put a new basket on; every second year enlarge the size. Leave the old basket on; it will rot away itself.

PERENNIAL BORDERS.

BY W. T. MACOUN, HORTICULTURIST, CENTRAL EXPERIMENTAL FARM, OTTAWA.

About ten years ago I began planting a perennial border near my house, the piece of land available being about 150 feet long and 12 feet wide, with a background of purple-leaved barberry hedge. The soil was a sandy loam in good condition, but it was improved before planting by digging in a good dressing of well rotted barnyard manure. Considerable planting has been done in that border every year for the past ten years, but it is not yet as we should like to have it.

A perennial border should have as little as possible of a formal look about it. It should have bloom from early in the spring until late in the autumn and the different flowers should come on in such rapid succession that there will be no places in the border where, on looking from one end to the other, it might be said: "There is not sufficient bloom there." A good collection of perennials was soon got together, but these were not found to give the desired results. Bulbs had been planted in fairly large groups through-

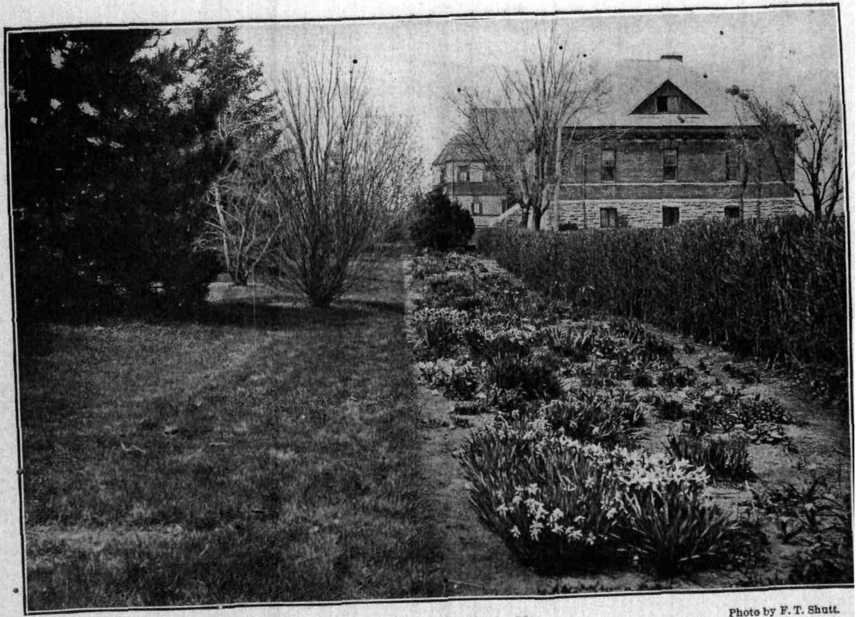


Photo by F. T. Shutt.

Perennial Border in Early May.

out the border for bloom in early spring, but when they were over, there was a noticeable blank where there were no flowers for a long time. These spots might have been filled with phlox drummondi, verbena, petunia, etc., but annuals of this description seemed to us not in place in a perennial border as there is something formal about them, although some annuals are often desirable. We, therefore, decided to plant the bulbs in smaller clumps of from six to ten, which has been found more satisfactory. If there is a large number of small clumps of bulbs in a border, the spotty appearance which a few of these little groups would give is avoided, and on looking down the border there is apparently an almost continuous mass of color. After the flowers are over these little clumps soon become inconspicuous, as the adjoining perennials which are to give the succession of bloom grow over them. While the bulbs are still in bloom the Iceland poppies begin to flower. This pretty and graceful perennial with its white, yellow, and salmon colored flowers takes up little room and was planted alongside the clumps of late blooming perennials from one end of the border to the other. Planted in this way they add much to the attractiveness of the border while occupying little space. They seed freely and, once established, increase very rapidly. They should be treated as biennials rather than perennials, as after the second season the plants are not satisfactory. The Iceland poppies bloom from May until July.

Another plant which has been used for giving a good effect throughout the border is the Rocket (Hesperis matronalis). This grows readily from seed, and once established in the border there is little trouble getting the plants, as it reseeds very freely. The white flowered rocket is the best and the only one we use. The rockets are at their best in early June. The Oriental poppy blooms at the same time as the rockets, and as they grow readily from seed there is no difficulty in getting a large number of clumps of these. The contrast in color between these immense scarlet and crimson poppies and the white rockets is very fine. One of the surest ways of having a blaze of color in the border for from four to six weeks in the latter part of June and July is to sow Shirley poppy seed broadcast early in the spring, hoeing out later on the plants which are not needed. Shirley poppies, while not perennials, are excellent while the border is still young and has not become crowded with perennials. In our border the Shirley poppies are now confined for the most part to the places where the tulips and narcissus have died down, and even here they are having a more difficult time each year to make a good showing owing to the growing clumps of perennials. Herbaceous perennials which are grown readily from seed and which are used for giving color to spots in the border which are weak in color at particular times, later in the season, are the peach-leaved Bellflower (Campanula persicifolia); Cashmirian Larkspur (Delphinium cashmirianum); Delphinium grandiflorum, and Coreopsis grandiflora.

In the foregoing account of the development of the border little has been said of the perennials which form the main features of the border, such as the iris, lillies, phloxes, pæonies, etc., and the many other perennials which no good border should be without. These should be arranged as far as possible with an eye to continuity of bloom, contrast and harmony in color and relative height.

The most difficult time to keep the border looking well is during the months of August and September, when, in dry seasons, especially, the plants begin to look rather ragged, and the border lacking in bloom. Close attention to the removal of flowers which have withered and to flowers stalks will improve the appearance of the border and will encourage later bloom on plants which have already flowered, but there should be some late blooming perennials which can be scattered pretty freely through the border and which will

Photo by F. T. Shutt.

Perennial Border in July.

not take up much room. One of the most satisfactory of such plants is Lilium speciosum, which blooms well through September. Another desirable plant, grown readily from seed, and requiring little room is the purple Cone Flower (Echinacea purpurea), which also blooms until severe frosts. As a guide to those who desire to start a perennial border the following lists of the fifty and twenty-five best perennials should prove useful. These lists are taken from a bulletin on Herbaceous Perennials recently prepared by me and published as Bulletin 5, Second Series, of the Experimental Farms.

The illustrations used for this paper are from photos taken by Mr. Frank T. Shutt, Chemist to the Dominion Experimental Farms, and show the border which has been described in the months of May, June, July and August. Note the change in the plants which are in bloom during these months.

List of Fifty Best Hardy Herbaceous Perennials.

Achillea Ptarmica fl. pl., "The Pearl."
Adonis vernalis.
Althæa rosea.
Anemone japonica, varieties.
" patens nuttalliana.
" sylvestris.
Aquilegia caerulea.
" chrysantha.
" oxysepala.
Aster-amellus bessarabicus.
Campanula latifolia macrantha.
" persicifolia and varieties.
Chrysanthemum maximum elegans.
Clematis recta.
Coreopsis grandiflora.
Delphinium cashmirianum.
" hybridum and varieties.
Dianthus plumaris, "Mrs. Sinkins."
Dicentra spectabilis.
Doronicum plantagineum excelsum.
Epimedium rubrum.
Gaillardia aristata.
Gypsophila paniculata.
Helianthus multiflorus "Meteor."
" rigidus "Miss Mellish."
Hemerocallis aurantica major.
" flava.
Heuchera brizoides gracillima.
" sanguinea splendens.
Iberis sempervirens garrexiana.
Iris aurea.
" German, in great variety.
" laevigata (Kœmpferi), in great variety.
Lilium auratum.
" speciosum, and varieties.
" superbum.
" tenuifolium.
Myosotis alpestris.
Pæonia albiflora and officinalis in great variety.
Papaver nudicaule.
" orientale "Novelty."
Phlox divaricata.
" paniculata (decussata), in great variety.
Platycodon grandiflorum.
Rudbeckia laciniata fl. pl., "Golden Glow."
Salvia azurea grandiflora.
Spiræa Aruncus.
" Filipendula fl. pl.
Trillium grandiflorum.
Trollius europæus "Orange Globe."

List of Twenty-five Best Hardy Herbaceous Perennials.

Anemone japonica, varieties.
Aquilegia caerulea and hybrids.
" chrysantha.
Campanula persicifolia, and varieties.
Chrysanthemum maximum, and varieties.
Clematis recta.
Coreopsis grandiflora.
Delphinium cashmirianum.
" hybridum, and varieties.
Dianthus plumarius, "Mrs. Sinkins."
Dicentra spectabilis.
Epimedium rubrum.
Hemerocallis aurantiaca major.
" flava.
Iris, German, in great variety.
Iris lævigata (Kœmpferi), in great variety.
Lilium superbum.
" tenuifolium.
Pæonia albiflora and officinalis, in great variety.
Papaver nudicaule.
Phlox paniculata (decussata), in great variety.
Platycodon grandiflorum.
Rudbeckia laciniata fl. pl., "Golden Glow."
Spiræa Aruncus.
Trollius europæus "Orange Globe."

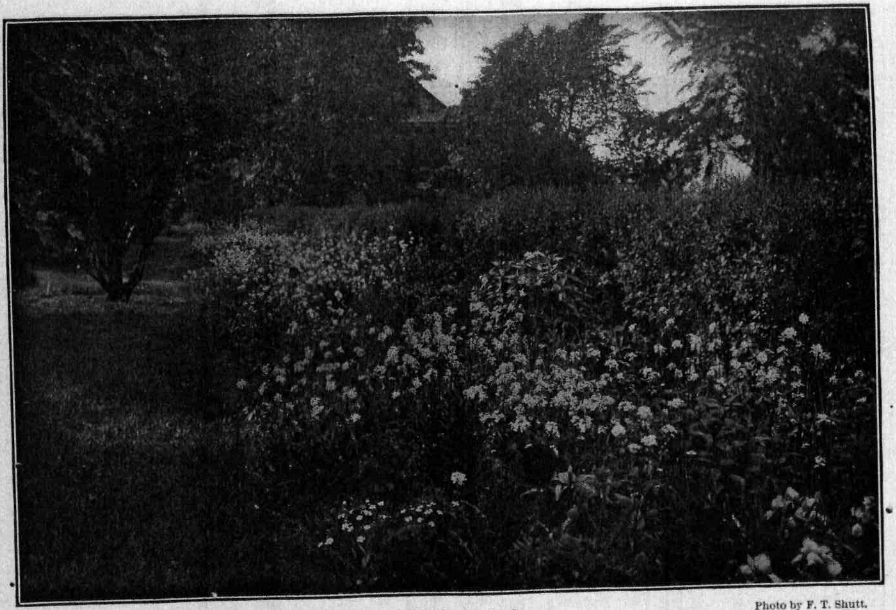


Photo by F. T. Shutt.

Perennial Border in June.

RESULTS FROM SEEDS DISTRIBUTED TO SCHOOL CHILDREN.

By Jas. A. Wiley, St. Catharines.

[Mr. Wiley's paper was read by Miss Radcliffe, Secretary of the St. Catharine's Horticultural Society.]

In 1906, for the first time, then St. Catharine's Horticultural Society distributed seeds to the school children of the city to be grown by them, and prizes were offered at the July and September exhibitions for the best bloom grown and exhibited. Sweet Peas and Aster seed were chosen for distribution that year and since. The committee appointed to have charge of the distribution of the seeds secured the co-operation of the school teachers in placing the seeds in the hand of school children. On a given day, each and every member of the school who desired to try to grow the seed, was given a packet of Sweet Peas or Asters, as desired.

Culture directions were printed on the envelope containing the seed.

Results from Seed Distributed. While all children who took the seeds did not succeed as was desired, yet the result in many cases was very gratifying.

In July of that year 65 exhibits of Sweet Peas were made at the Sweet Pea Exhibition, and in September, 217 exhibits of Asters at that show, which reflected credit on the efforts of the children making them.

The exhibit of Sweet Peas and Asters for 1907 were equally gratifying, and showed a marked improvement in the quality of bloom exhibited. The year 1908 was the best yet. The Society not only distributed seeds to the city schools, but included Port Dalhousie, Merritton, Thorold, Grantham, and Louth Townships.

Though this did not prove a good year for Sweet Peas, there were 63 exhibits at the exhibition in July which showed a quality equalling many of the exhibits entered by the adults.

In the September exhibition there were 265 exhibits of Asters by school children, the largest number of entries yet made, filling a space of over 260 square feet, and a little crowded at that. The Asters showed such a marked improvement in quality and manner of displaying them that it was realized that the adults would have to look well to their laurels or they would lose them.

Other Results. The time is not far distant when the St. Catharine's Horticultural Society will be receiving many members from the ranks of the school children, indeed, some of them have joined already.

Then, not only are the creditable exhibits to be noted and the membership that may accrue to the Society through this work, but the vaster and more marked results are the improvements in the yards and gardens where school children are interested. Many an ugly weed patch has been turned into a spot of beauty, admired by all, and this influences the child life. While at work and associated with the beautiful, *the habit of industry acquired* cannot but make the child a better citizen.

By all means interest and educate the children in this work. It is worth the effort.

Prof. Hutt: Before we drop this question of school children's work, I would like to say that it is a most important one, and the societies that are doing the best work are those who are taking up this line with the school children. We have undertaken this in Guelph for some years, and we work on the same lines as St. Catharine's.

R. B. Whyte: You should give more instructions to the school children as to how to plant the seeds. We find it better to issue a bulletin of three or four pages, and give most explicit instructions. You have to make things very plain for children, and it would be difficult to give enough directions on the envelope enclosing the package of seeds.

Perennial Border in August.

Photo by F. T. Shutt.

LABOR SAVING TOOLS FOR GARDEN WORK.

By H. Simmers, Toronto.

When your Secretary requested me to read a paper at this Convention on this subject, I accepted the same, not realizing at the time the difficulty I had before me of preparing an interesting and practical paper.

The title of this paper is somewhat deceptive. At the first blush it has the appearance of a certain sweet simplicity, but when one goes into the subject, the real difficulties appear.

For a practical man to go to work and pick out the tool or tools that he wants seems easy, as, before you commence to work, you have pretty well made up your mind what tools you are going to use on the particular work you intend to do; but to sit down and arrange as many as possible of the labor saving tools that you would use, is a more difficult task than I thought it would be until I got to work.

I assume that I am to speak on tools most suited for amateur work, because to write on this subject for professionals would enlarge it considerably.

The first, and still the most important tool in the garden, is the human hand, and no doubt in ages past it was the only one. Still, at a very early period, tools of some description had been devised to lighten the labor of the gardener. In our youthful days, also further back than some of us care to admit—a conundrum was propounded. It ran thus, "When Adam delved and Eve span, where was then the gentleman?" Of course, the answer, the obvious answer, is that Adam was the gentleman; and mark you, he was a gardener. Our immediate interest, however, is to enquire what Adam delved with. No doubt he did much work with his hands, still in many gardening operations the very best of tools, but he could not delve very well thus, unless he had something to aid him. The cradle of the human race is in the East, and it is there we can observe customs to-day, which had their inception in Adam's time or not long after. The soil there is so sandy and easily worked, that a very primitive stick sharpened, would be all the labor saving appliances required. Irrigation is the great problem there. In lands under different climatic conditions, different circumstances naturally arise, and in our own land one must admit that stirring with a pointed stick would not have much effect. Therefore other labor saving tools had to be invented. The king of all is still the spade, which is the most inexpensive, and work well done with it produces more crops than any other form of culture.

You will find that among the first and the last things to be done in almost any garden in spring or fall, is to have it dug in the spring and again in the fall, and those who are not so fortunate as to be able to employ a man for this work, will better understand the necessity of a pair of good strong arms.

The following is a list of a good many articles that I have used myself, that I know are labor saving tools: Spade, shovel, lawn rake, steel rake, field hoe, Dutch hoe, spading fork, manure fork, garden reel, garden line, grass hook or sickle, pruning knife, pruning shears, pruning saw, half moon edging knife, indelible pencil, labels, appliances for destroying insects, hot-bed thermometer, graden trowel, tree pruner, watering can, wheelbarrow, lawn mower, hand weeders, such as Hazeltine's, Excelsior, etc., wheel plow, wheel hoe, hand seed drill.

This is a sufficient list of labor saving tools for the amateur. It seems to me almost useless to go into the detail and description of all the tools that I have listed, and from which I will refrain, but amongst the list, I

A Pretty Avenue in Perth. Photo from Rev. A. H. Scott.

would like to draw more attention to the Combination Seed Drill, which has the garden plow, wheel hoe and seed drill combined. Now, to those who have a more pretentious vegetable garden, this modern implement is apt to encourage the amateur to extend his work. I would strongly urge the use of one of these combined machines.

I would also suggest, that all the tools possessed by the amateur be hung up neatly and systematically, and that they should not be thrown in a corner in a careless manner. I see no reason why man's labor saving tools for garden work should not be kept in the same precise manner that a woman keeps her kitchen utensils. I will add further, that the garden tools should also be kept clean and ready for use.

In conclusion let me add, that many a man can be judged by the orderliness in which he keeps his tools, as also by the way that he keeps his garden free of weeds.

REPORT FROM DISTRICT NO. 1.

By Rev. A. H. Scott, Perth.

The District which by your wish and favor, I have the honor to represent is in a significant sense, the gateway to Ontario, and thereby to the vast west of the Dominion of Canada. Through it flows the two great streams, the St. Lawrence to the south and the Ottawa to the north. At the confluence of these two rivers, and a few miles beyond the Ontario boundary, is the young, vigorous and promising enterprise, costing, in acres and buildings, millions of money, known as the Macdonald College and farm. In another part of the district is the older and better known Central Experimental Farm operated by the Government of Canada through the Department of Agriculture. Within our bounds we have the political capital of the Dominion and, close by, the Commercial Metropolis of Canada.

In our district were performed many of the pioneer transactions of our portion of the new world. Here were the first settlers, the first churches, the first attempts at government, the first encounters with the forest, and the first experience in Horticulture. To me our history and our environment present both responsibilities and inducements.

To any who attach special importance to counted heads it might not be out of place to state that in our district we have the largest society within the Province. If numbers were estimated by ratio or proportion my own society at Perth would perhaps be larger than the society at the capital. But we live in deeds not in years or numbers, and our accomplishments in District No. 1, to our credit be it said, are far and away behind our ideals.

During the year now terminating and throughout previous years, not as a whole but in parts of the whole, we have been seeking to contribute something to the good cause for which we are organized in the various ways that are common to our societies throught the fair Province of Ontario. Our cemeteries and our canal banks, the grounds about our Public Schools and railway stations, the environment of our hospital and orphans' homes, the civic improvements in town and capital, the embellishments of the country front and the village plot—these and a score of others that might be mentioned belong to a catalogue of endeavors up to the present.

Photo from Rev. A. H. Scott.

A Leafy Bower in Perth.

Photo from Rev. A. H. Scott.

A Shady Walk in Perth.

One of the newest features in our aim is the starting of certain machinery to attract our fellows in England, Ireland and Scotland who think of changing their trans-Atlantic quarters for cis-Atlantic homes by making known to them both residential and horticultural conditions which we believe are found between our two fine rivers and among the little lakes and attractive concessions that this association has mapped out as our particular sphere.

If we were coming down to the definiteness of names and thinking of these in connection with the work of the Horticultural Association perhaps among those who have visited us no name would be more conspicuous than that of J. Horace McFarland, whose presentations in a few places were much looked forward to. Then, as the expression of a sobering thought, and referring to the number that has gone out from us, who that think of one so well known and influential will not share in our sorrow by reason of the unlooked for vacancy that has been created by the decease of our brother and friend, Dr. James Fletcher of Ottawa. *Sic transit gloria mundi.*

But, facing forward, it must be our aim to have such conditions in our own district, and in districts farther west than ours, that the millionare's mansion and the humble man's dwelling will manifest a growing appreciation of nature's blessings as a part of the preparation that fits a citizen of our earthly realm for the beauties that are awaiting us in the glory that excelleth.

REPORT OF THE HAMILTON HORTICULTURAL SOCIETY FOR 1908.

BY A. ALEXANDER, HAMILTON.

The principal feature in the year's work was the holding of a two-day horticultural meeting at the end of April.

The Ontario Department of Agriculture and the Hamilton Civic Improvement Committee co-operated in this, the former contributing the speakers, all of whom were experts in the various subjects treated. A genuine interest was manifested by the public who attended, who took copious notes and asked questions, so that the sessions had more the appearance of high school classes than of ordinary lectures. The lecture on "The City Beautiful," given by Mr. J. Horace McFarland, was very opportune; coming as it did on the evening of the first day it fitted in so well into the idea of the meetings that it seemed a part of it, though held in a different hall.

To all these meetings the teachers and students of schools were invited, many of whom availed themselves of the opportunity.

During the season lectures have been given by Mr. Macoun and Dr. James Fletcher, of Ottawa, and Mr. Hunt, of the Ontario Agricultural College.

The usual distribution of plants worthy of cultivation, with cultural instruction, has been issued and about three hundred copies of the "*Canadian Horticulturist*" distributed monthly to the members of the Society, who now number 300, an increase of 130 over last year.

The result of all this is seen in the awakened interest in the community, and in the improvement of lawns, gardens and general surroundings of their residences.

Photo by Rev. A. H. Scott.

One of the oldest Gardens in Canada.
The home of Miss Matheson, Perth.

REPORT OF THE LONDON SOCIETY FOR 1908.

The directors of the London Horticultural Society in consideration of the funds which they had on hand at the beginning of the year, decided to make a grant to the Public and Separate Schools of $10 each, to be used by Mr. J. S. Pearce, Park Superintendent, in designing beds, etc., to enhance the appearance of the grounds surrounding the schools and to bring prominently before the scholars the idea of flowers, etc., for beautifying their own home surroundings. This grant was supplemented by a similar amount from the Board of Education, and the Separate School Board also granted a similar sum. The work was under the personal supervision of Mr. Pearce and has resulted in improving and beautifying the school grounds in a marked degree. The sum of $220 was altogether expended by the society in this cause.

The society, also, in answer to a request from the Play Grounds Association of London, granted a donation of $25 in furtherance of their work and to be used in fitting up play grounds, etc. The members of the London Horticultural Society are in hearty sympathy with this work, and are of the opinion that public play grounds should be established in each ward, but this cannot well be done except with the hearty co-operation of the City Council, as the funds would have to come from the city.

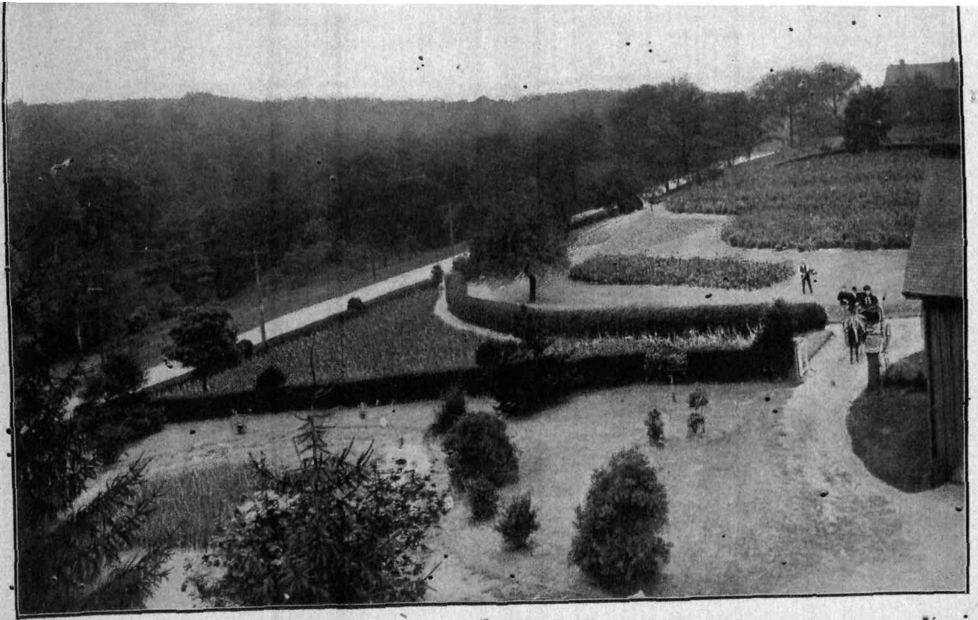
This year, as in the proceeding one, this society with the consent of the School Boards, issued to the scholars packages of seeds. The price was placed low, namely two cents per package, so that they were within the reach of every child. Some 5,800 packages were distributed to the school children, and it goes to show the great and increasing interest which is being taken by them in growing flowers and vegetables and in beautifying their home surroundings. The more we get the children interested in growing flowers, the greater improvements will be seen in the homes and front yards of the dwellings, and less vandalism will occur throughout the city.

The directors made arrangements for lectures to be given each month in the spring. The first one was delivered on February 25th, when Mr. Pearce and Mr. Gammage spoke on seeds and bulbs, and their cultivation, and Mr. Fox also spoke on the growing of mignonette. On Thursday, March 25th, Principal Liddicoatt spoke on bulbs for spring planting, and Professor Bowman on wild flowers, more especially those suitable for garden cultivation. On Tuesday, April 21st, Prof. Hutt, of the Agricultural College, Guelph, gave an address before a large attendance of members, his lecture being supplemented with stereopticon views.

Annual Flower Shows.

A fine display of flowers was made by the members of the Society in the City Hall, on the 24th and 25th of June. Some beautiful exhibits of roses were shown, and some specimens of the wild orchid, or lady slipper, gathered by Professor Bowman, created a great deal of admiration. A large collection of Canterbury bells, from the Asylum grounds, was also highly commented upon. Some 35 members of the Society sent exhibits.

The second flower show was held in the City Hall on August 12th and 13th, when over forty members sent in exhibits of tuberous begonias, gladioli, phlox, and other perennial flowers, Mr. H. H. Groff, Simcoe, on request of the president, most kindly sent a beautiful display of gladioli, which was exceptionally fine and greatly admired.



Where Flowers in Luxuriance Grow.

FLOWERS AND SHRUBS ON PUBLIC AND SEPARATE SCHOOL GROUNDS, UNDER THE DIRECTION OF MR. J. S. PEARCE.

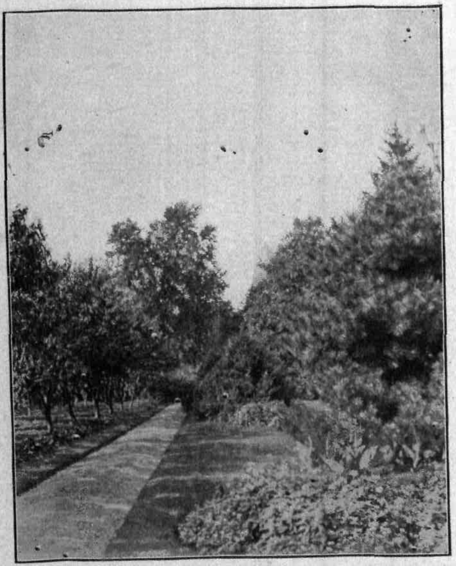
The ten dollars granted by your society and supplemented by same amount from the School Boards, both Public and Separate, has been carefully expended with the exception of two or three schools. The work on these will be done this fall or next spring, as there are good reasons for them not being done earlier. The expenditure of this money on each school I left largely, and in some cases entirely, in the hands of the principals of the schools, with instructions to buy where and from whom they thought best. I visited all of the schools twice, and many of them three or four times. I found all the principals, and many of the teachers, only too anxious to carry out the work and follow my suggestions. There is much of this work, and very much more could be done if funds were available. The observing citizens have noticed a great change in very many of the school grounds this summer, and should this good work be continued for a few years, the improvement will be very marked. The imperfect assistance that I was able to give the schools has been very much appreciated by the teachers, and especially by those in the Separate Schools; they being all lady teachers, were much in need of some one to advise and plan for them. Many of their schools were without a shrub or flower of any kind.

The $25 donated by your Board for the C.P.R. station garden was expended for plants, flowers, and labor. This has been very much appreciated by the citizens the past summer. The beds are again planted with bulbs supplied by the railway authorities, and I have instructions from Montreal to put in two beds of tulips at the passenger station this fall to be followed by flowers next summer. I had suggested this several times, but without success till this fall.

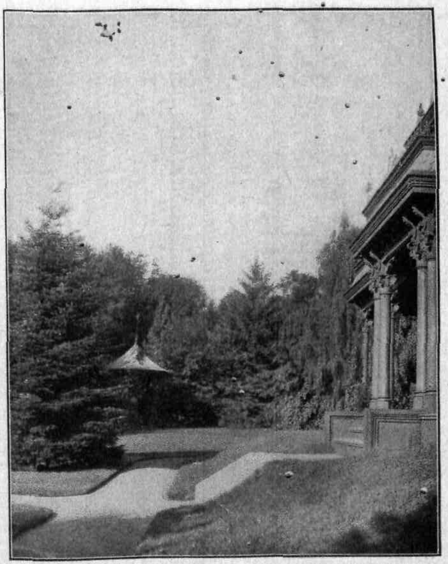
BRANTFORD SOCIETY FOR 1908.

Mr. Rose, Brantford, gave a short verbal report of the work of the society in that city, which had been almost altogether in the line of distributing seeds to school children and holding a show in connection with the same, which had been a great success.

The PRESIDENT:—I would like to remark for the benefit of the new Board of Directors that excellent as these reports are, they do not go far enough. With the exception of Rev. Mr. Scott, the others simply confine their reports to their own town or city, notwithstanding the fact that they represent groups of counties. I hope the directors will in future understand that their duties are to present a report covering the state of the Societies in the district, with whom they are supposed to keep in touch, not to confine their efforts solely to their own society.



Among Flowers and Fruit in the Grounds of Mrs. W. J. McCalla.



A View of Mrs. McCalla's Grounds.

NOTES ON SOME NEW PÆONIES.

By R. B. Whyte, Ottawa.

When in England last June I visited all the exhibitions and nurseries available, where Pæonies were shown, and made careful notes of those that I considered the most desirable varieties that were new to me, and I thought it would be interesting to those who had heard my talk on Pæonies and how to grow them, with list of varieties recommended at our last meeting, if I gave a brief description of those selected from the very large collections examined. Among the many hundreds of good sorts in cultivation there are doubtless many as good, and possibly better, than those noted, but any grower wishing to add to his collection can rely on the desirableness of any of the varieties in the annexed list. At the Royal Botanical Society's Show at Regent's Park in June, the first one at which Pæonies were staged in any quantity, the large exhibitors were Kelway & Son, Barr & Son, T. S. Ware, and Paul & Son, all of whom had very large collections. I visited Barr & Son, at Surbiton, and carefully examined their extensive collection. Pæonies were one of the main features of the Royal Horticultural Society's show, and at the Franco-British flower show. At the Royal Horticultural Society's gardens at Wisley there were a few varieties in their large collection in fine condition at the end of June. In the following list these that I considered the very finest in color, shape and size I have marked with **; those marked with *, while they appeared to me not quite up to the standard of the **, are still very fine sorts and well worthy of a place in any collection.

In the light of my increased experience the list of twelve best sorts given last year might be revised and improved by the substitution of four of the best of the varieties in the annexed list: Baroness Schrœder, Miss Salway, Ella Christine Kelway, Bunch of Perfume, taking the place of Marie Lemoine, Queen Victoria, Lady Leonora Bramwell, and Duke of Wellington.

Pæonies Exhibited at Royal Botanical Society's Show, Regent's Park, June 17th, 1908.

Kelway:

**Bunch of Perfume.—Rich deep pink, large, very double.—P.
Dorchester.—Blush, very fine.
Duchess of Teck.—Creamy white to pink, guard petals, large, very fine.
Ella Christine Kelway.—Extra fine pink, very large, flat, large petals.—P.
Miss Salway.—White,-primrose guard, large, extra fine centre.—P.
Lady Ester Smith.—White guards, cream centre, a few large petals in centre.
Mr. Manning.—Dark crimson, very large, fine form.

Barr & Sons:

Lady Ardilaun.—White, slightly tipped carmine, very large and very double.
Bonaparte.—Dark crimson, very large, fluffy petals.
Humei Carnea.—Pink guard, white centre, large, very fine.—P.
Delicatissima.—Blush, very large and double.—P.
(Floral Treasure).
Mad. Calot.—Creamy blush, deep shade, very fine.—P.
La Tulipe.—White, faintly tipped carmine, very fine shape.—P.
Albert Crousse.—Clear pink, very large, very double.

Kelway:

*Sainfoin.—Rich deep pink, semi-double.
Hallam.—Crimson, large and very double.
Limosel.—Deep pink, very double, good size.—P.
Baroness Schroeder.—Pale pink to cream, large guards, medium size.—P.
Portia.—As Festiva Maxima, with a shade of blush.
Sir M. Singe.—Dark crimson, ball shape, very fine.

Barr & Sons:
Countess of Clancarty.—Very fine, pure white.—P.
Gloire de Patrie.—Very large, deep pink.—P.
Lord Rosebery.—Fine shade of pink.
Leonie.—Pale pink, medium size, fine shape and color.—P.
Triomphe de Paris.—Creamy with a shade of pink, large guard.
Alba Superba.—White, cream centre, good size.

Barr's Nurseries, June 19th.
Marshall McMahon.—Light crimson, large.
Eugene Verdier.—Pale pink, semi-double, shaded salmon.
Washington.—Silvery pink.
Snowball.—White, large guards.
Silenus.—Silvery pink.
Gen. Cavaignac.—Rosy silvery pink, shaded clear pink.—P.
Charles Verdier.—Dark rosy.
Duchess of Nemours.—White to faint primrose.—P.
Mistress Parkinson.—Lavender pink, fine form.
Duchess of Sutherland.—Pink, good color and shape, medium size.—P.

Kew Gardens, June 19th.
L'Elegance.—Rosy pink, good.—P.
Lady Carrington.—Blush to white.—P.
Mons. Dupont.—Very light La Rosiere, very fine.

ROYAL HORTICULTURAL SOCIETY, 23RD JUNE.

Kelway:
**Sir Geo. White.—Very large, rosy pink.
Rev. W. Wilks.—Very large pink.
Lady Romilly.—As Mad. D'Hour, rather deeper pink.
Marie d'Hour.—Rosy pink, very fine.
Mons. Roussilon.—Very large, dark blush.—P.
*Lottie Collins.—Very large, light crimson, semi-double, yellow anthers.
Lord Cromer.—Large rosy pink.
Duke of Devonshire.—Light crimson, yellow centres.

FRANCO-BRITISH EXHIBITION, 24TH JUNE.

R. H. Bath:
**Mons. C. Leveque.—Extra fine blush.—P.
Enchantress.—Very pale blush.
Claude Loraine.—Extra large pink, good form.
Edmond About.—Extra fine pink, streaked carmine.
*Marie.—Very pale blush.
Gismonda.—Pink, very large.
Mad. Hutin.—Very double pink, centre nearly white, ball shape.

WISLEY, JUNE 27TH.

**Viscount de Fonceville.—Very large pink, fine form.
Mde. D. Galhau.—Very large pink, extra fine.
*De Candolle.—Rosy pink, fine shade.
Felix Crousse.—Dark rosy red, ball shaped.

REVISED LIST OF TWELVE BEST PÆONIES.

Md. D'Hour.—Very large, free bloomer, flesh color, tipped carmine.
M. Jules Elie.—Silvery pink, very large.
La Rosiere.—White, yellow centre, semi-double, remarkably free bloomer, very sweet.
Festiva Maxima.—Very fine, white-tipped carmine.
Floral Treasure.—Soft rose, fragrant, free bloomer.
Asa Gray.—Salmon pink, very large, free bloomer.
Claire Dubois.—Bright rose, very large, free bloomer.
Ella Christine Kelway.—Extra fine pink, very large, flat, large petals, sweet.
Baroness Schroeder.—Pale pink to cream, large guards, perfumed.
Miss Salway.—White, primrose guards, large, very fine centre, perfumed.
Bunch of Perfume.—Rich deep pink, large, very double, perfumed.
Rubra Superba.—Purplish crimson, very free bloomer.

TREES IN VILLAGES, TOWNS AND CITIES.

Tree planting is a work which should be inaugurated and systematically carried out by the members of Horticultural Societies working in conjunction with Municipal Councils. Trees should be planted for the following reasons:—

They increase the value of surrounding property.

Protect the pavement from the heat of the sun.

Add beauty and comfort to city streets.

Cool the air in summer and radiate warmth in winter.

Purify the air—the leaves inhale carbonic acid gases and exhale oxygen.

Aid in counteracting the unnatural conditions of city life.

Home of Mrs. W. J. McCalla, St. Catharines.

The following varieties are now being utilized in many towns.

Maples, preferably hard; Elms (American); Birch (white); Oak, and many varieties of evergreens.

The following distances should be left between trees:—

1. Maples—15 to 25 feet apart.
2. American Elm—15 to 18 feet.
3. White Birch—16 to 20 feet.
4. Oak—15 to 18 feet.
5. Evergreens—according to variety.

REPORT OF THE COMMITTEE ON NOVELTIES.

HARDY PERENNIALS.

To begin with the awakening season of spring: Crocus "Blue Celeste," a soft azure blue, Barr & Sons, describe as "the most beautiful of all the large flowered crocuses," and they are right; it remains long in bloom.

The Earliest Muscari (Grape Hyacinth) is *M. Azureum robustum.* It is larger and handsomer than the type, blooming the 8th of April, 1908, when the later ones were only just peeping above the ground—the color is pale blue with faint white lines. The exquisite muscari "Heavenly Blue," one of the later ones, is aptly named, and the leaves have a good erect habit which some varieties lack.

Two other beautiful ones are *M. botryoides candidum*, white delicately tinged with rose, and *M. b. pallidum grandiflorum*, a pale blue, shading to pink. These are contemporary with Heavenly Blue, and are about three weeks later than *M. Azureum*.

The beautiful *Scilla Sibirica*, one of the richest blues in flowers, has a white flowered sister. *S. Sibirica alba*, identical with it, except in color, is a very pure white. *S. bifolia* is spoilt by its lanky growth, but *S. bifolia carnea*, with pale, flesh-pink flowers is lovely. These two were grown in pots so I cannot vouch for their hardiness. Of the May flowering Scillas (which are almost like a Roman Hyacinth in shape and size of bloom), *S. Hispanica alba compacta*, with a large spike of pure white bells, is very fine. "Blue Celeste" is a fine blue, and "Rosalind," described as a clear pink, but which is really a mauve pink, is pretty. Of the Patula varieties, *P. major* is a lovely soft mauve and very large in both spike and flower. The old *S. Nutans* (English Blue-bells) belong to this section of the Scillas and are quite hardy though not as beautiful as those just mentioned.

In Polyanthus, those known as Dean's Hybrids are most beautiful and quite easily grown from seed. Every tint from "old rose" to the deepest magenta crimson, on through the yellow and orange shades to wallflower reds—all the gorgeous colors imaginable run riot in them. There are also white and cream and primrose with large eyes of varying shades of yellow, and varying also in size from a mere ring in the centre in some, to usurping half the flower in others. The individual flowers being nearly as large again as in the old types. They began blooming on the 28th April, 1908, and in my garden diary on May 24th, I find the note "Polyanthus just in their glory."

Dean's Hybrid Primroses are also good, but are more difficult to raise from seed. I had only four or five plants from a packet, but they were all different; one, the usual Primrose color; the others various "Art Shades" of rose. All had the old fashioned fragrance, however. Wilson's Blue Shades I have not yet tried.

The double form of *Alyssum Saxatile* is not as showy as the single; the blossoms wither instead of falling off, as they do in the single, which gives a faded look.

In the "Rock Cress," *Arabis albida*, the double form is a decided improvement on the single, as it lasts much longer and is generally more effective. The single one is valuable though, as it is earlier than the double, and it is practically over before the double begins.

Barr's Dwarf Bearded Hybrid Crimean Irises, of which I got seven varieties in 1907, were a delightful surprise in their beauty as well as earliness. Pumila Caerulea, four inches high, was the first in bloom on the 18th

of May—an exquisite pale blue. Orange Queen, 23rd May, one foot high, a clear, pure yellow. This and "Canary Bird," nine inches high 24th May, are almost identical, the latter being a stronger grower and better on that account.

Bridesmaid, white; Cyanea, deep blue-purple; Blue Stone, light and deep blue; and Fiberi, deep violet blue, were all lovely, some being quite as large in the flower as the ordinary Iris.

Amongst what is popularly known as the German Iris (*I. dalmatica*), "Princess Beatrice," towers above all the others in size, form, and beauty of coloring. It is described as "a clear, deep lavender," which scarcely does it justice; a pale blue mauve sounds more attractive and is quite as truthful.

Others of the newer Iris that are well worth growing are "Aurea," the softest chrome yellow; Mrs. Newbronner, a splendid rich yellow, but a poorly formed flower; Darius, standards, bright yellow; falls, primrose, reticulated purple, brown-to-mauve, with a deep border of the primrose; a very fine, softly colored flower, the best of its color that I possess. *Alba* (Syn. *Innocenza*) a good clear, clean white, not so graceful as the early white Florentina, but valuable, as it flowers later. Mr. H. Darwin is said to be the finest white, but mine died, so I have not seen it. "Lucretia" is a fine large flower. Standards, primrose, and falls, primrose and mauve, the colors blending beautifully; it has a large spike and carries its flowers well.

The richest and best of the purples is "Kochii" (Syn. *Atropurpurea*), a huge, well shaped flower, well placed and the stem and the spikes well furnished with flowers. Almost as good is "Purple King," with just a hint of more red in the purple.

"Jacquiniana," standards, fawn, flushed with rose color, and falls, wine crimson, is one of the handsomest of the family. I have had the same Iris sent me as "Lord Rosebery," and also as "Dr. Bernice."

Of the Siberian Iris, some of whose varieties flower later than the German, and help to keep up the succession, two very beautiful ones are "Blue King" and "Snow Queen," though perhaps no more so than the old *S. Orientalis*, which is attractive both in bud and flower.

The "Sun Rose," "Mrs. C. W. Earl," a hybrid of *Helianthemum vulgare* (as Robinson says all the hybrids are), has proved hardy for two winters, against a warm west wall in well drained soil. This one has double crimson flowers and is a pretty little creeping shrub.

Veronica teucrium dubia (syns. prostrata and rupestris) though possibly not a novelty except in Canadian gardens, is such a beautiful little creeping plant (four inches in height) that it should be grown by everyone. Its tiny spikes of brilliant blue flowers literally smother the foliage. It blooms in June. It has proved hardy the last two winters.

Hemerocallis aurantiaca major is a very handsome "Day Lily," very much larger than the old *H. flava* (the "Lemon Lily") and a soft, clear apricot color with no hint of tawniness in it. It is reported to be slightly lacking in hardiness, but mine came through last winter safely without any particular attention.

Erigeron speciosus superbus, is a most satisfactory plant without the weedy effect of the type (*E. speciosus*). In early July its large, pale mauve flowers cover it with bloom and they last well.

Spiraea Aruncus Kneiffi is a graceful cut-leaved variety, pretty, both in and out of bloom.

Spiraea Kamschatica (syn. *gigantea*) is so handsome in both foliage and flower, that I cannot resist mentioning it though it may not be new. Its

large, deeply lobed, palmate leaves, are most decorative, and its snowy flowers are as beautiful as a spray of elder blossom and not unlike it.

Anchusa italica, "Dropmore Variety," which is so frequently mentioned in English publications as being one of the most important of the newer hardy plants, is in color a very beautiful rich Larkspur blue, but its weedy growth makes it unsuitable for small gardens. Of the newer named varieties of Delphinium I have no knowledge, but Mr. Byfield's collection grown from seed of Kelway's named varieties is the very acme of perfection in Larkspurs—every tint of blue, from the palest to the deepest, and every combination of mauve and blue, and blue and purple, and—rarest of all—some creamy white; some very double, some semi-double and others single, with "bees" both light and dark, until one wonders if every possible change has not been rung in them. The flowers are huge and so are the spikes in most cases, so beautiful are they that it seems as if it would be utterly impossible for the named ones to surpass them.

Lysimachia clethroides ("Snowy Loosestrife"), two to three feet high, with long arching spikes of white flowers, in July, is a good plant for rough places, where its spreading habit is no drawback. It is as bad as Golden Glow in that respect.

Monarda didyma var. "Cambridge Scarlet," is a great improvement in Bergamots, the spikes being larger and fuller and of a much more brilliant color.

Phlox Suffruticosa var. "Miss Lingard," is an early white phlox that can scarcely be too strongly recommended. "Indian Chief" belonging to the same section, is a miserable color, a dull magenta. I have not tried any others.

Of the later Phloxes, Hybrids of *P. paniculata*, "Von Hochberg," is the finest deep crimson, "Jocelyn," a vivid salmon-red with deeper eye, "R. P. Struthers," a deep salmon rose; "Edmond Rostrand," deep magenta rose with large white eye—enormous flowers—(Jourdan is the same); "Etna," a brilliant orange red, "Von Goethe," an exquisite rose color, deeper than "Pantheon," which is also good. "Daukse Dandrige," and "Eugenie Dauzauvilliers" are both distinct, and yet much the same tint of pinkish lilac and white, very dainty, as is "Peach-blossom," white suffused with the faintest pink. "Henri Murger" is a very fine, pure white with a large eye of deep rose. "F. G. Von Lassburg" is the finest tall pure white, and "Hermione" is a charming dwarf white, ten to twelve inches high, with such large trusses of bloom that it is as broad as it is long.

Helenium "Riverton Gem" with flowers of a rich wall-flower red is a handsome plant, tall, and with the good staying properties of the genus *H. autumnale cupreum*, is not nearly as handsome, the red being shot with gold, sounds well, but in reality gives an indistinct coloring which is not effective.

Anemone Japonica, "Queen Charlotte," is a very beautiful pale, silvery pink. Exquisite as these late Anemones undoubtedly are, their lack of hardiness is a great drawback.

The two *Boltonias* "Asteroides," white, and "Latisquama" mauve, growing five to six feet high, are indispensable fall blossoms, reminding us of our beautiful wild Asters, of which, by the way, there are many species worth cultivating, particularly *A. grandiflorus* with its rich mauve-purple flowers, blooming now; and, though a Virginian, it appears to be hardy here. Of these "Star-worts" or "Michaelmas Daisies," Barr & Sons catalogue (of species and their hybrids) over a hundred varieties.

Cimicifuga Simplex (a Japanese Snake-root), has long wand-like spikes of feathery white flowers in September, and is well worthy the Award of Merit it received from the R.H.S.

Aconitum autumnale, var. *Fischeri*, is a very beautiful Monkshood, of the softest blue. It blooms in October, when such flowers are scarce.

Polygonum baldschnanicum is a climbing vine, of very graceful habit, with white flowers daintly pink tinted. It has stood for three or four winters here, so may safely be called hardy. It flowers more or less all summer.

P. multiflora is a very rapid grower, but useless as a bloomer, as it is always frozen down before its flowers have a chance to open fully.

W. T. MACOUN,
M. E. BLACKLOCK,
H. L. HUTT,
Committee on Novelties.

The PRESIDENT: We have reached the end of our programme, I do not think there is one of you, who has had the privilege of attending this third annual Convention of the Ontario Horticultural Association, but will be able to report to your local Society that you attended the most successful gathering of the kind ever held in this Province. I am sure we have contributed a very important and interesting chapter to the science of Horticulture in this country. I thank you all for your interest, which has been sustained all through, in spite of the great many other attractions in the city, I know it is a temptation to many delegates who are sent here to represent the various societies to go somewhere else. I congratulate you for having stuck to your post of duty. It shows the entrancing interest you feel in your work. I would like to thank, on the behalf of the Association, the Toronto city authorities for giving us the free use of this spacious committee room. We owe them a debt of gratitude for that. I see no reason why this Association should not become the Royal Horticultural Society of Ontario.

The meeting then closed with the singing of the National Anthem.

ARBOR DAY.

God save this tree we plant!
And to all nature grant
  Sunshine and rain.
Let not its branches fade,
Save it from axe and spade,
Save it for joyful shade—
  Sheltering the plain.

When it is ripe to fall,
Neighbored by trees as tall,
  Shape it for good.
Shape it to bench and stool,
Shape it to square and rule,
Shape it for home and school,
  God bless the wood.

Lord of the earth and sea,
Prosper our planted tree,
  Save with Thy might.
Save us from indolence,
Waste and improvidence,
And in Thine excellence,
  Lead us aright.

—*Henry Hanby Hay.*

STATEMENT OF ACTUAL RECEIPTS AND EXPENDITURE OF SOCIETIES IN 1908.

Horticultural Societies.	Members' fees.	Legislative grant.	Municipal grants and donations.	Gate receipts at exhibitions.	Total actual receipts.	For exhibitions.	For seeds, bulbs and plants.	Lectures and periodicals.	Officers' salaries.	Total actual expenditure.
	$	$	$	$	$	$	$	$	$	$
Amherstburg	160	100	......	......	248	......	207	2	......	246
Barrie	132	63	43	55	293	132	47	......	......	291
Belleville	76	107	......	......	191	34	43	8	50	169
Bowmanville	110	106	......	......	234	......	154	60	......	235
Brampton	169	156	......	......	325	......	212	85	10	314
Brantford	75	99	100	......	274	55	63	20	35	282
Cardinal	66	82	29	10	194	12	*120	32	2	212
Cayuga	143	54	17	5	225	81	145	3	18	282
Clifford	152	148	46	115	552	254	......	16	20	431
Clinton	115	122	40	......	277	4	225	......	10	253
Cobourg	91	84	10	......	210	......	91	91	......	196
Collingwood	60	126	......	41	227	45	24	53	15	181
Durham	51	65	......	......	136	......	72	6	25	135
Elmira	75	67	......	34	183	41	83	38	[illegible]	191
Elora and Salem	52	42	......	......	94	67	......	......	[illegible]	97
Fergus	60	56	......	16	134	75	......	......	10	118
Galt	206	137	103	44	508	228	73	46	33	502
Goderich	80	40	40	......	160	......	40	61	20	142
Grimsby	105	42	10	......	158	......	134	51	......	193
Guelph	104	108	130	......	346	91	120	109	......	344
Hamilton	298	339	......	......	637	......	308	335	46	806
Hespeler	72	63	......	......	135	28	48	37	7	140
Kincardine	122	110	......	......	251	......	74	58	25	235
Kingston	291	209	......	70	599	253	......	......	50	499
Lindsay	93	83	4	......	182	12	71	54	20	177
London	202	404	......	......	801	......	324	117	......	817
Midland	91	56	......	......	147	......	48	51	......	123
Millbrook	57	57	15	......	129	......	76	23	......	137
Mitchell	111	101	......	......	213	......	132	55	10	205
Napanee	67	70	......	......	162	......	125	33	25	196
Newmarket	83	80	75	30	307	128	......	......	25	307
Oakville	102	77	......	......	179	......	48	10	15	186
Ottawa	1,010	725	......	......	1,735	313	500	358	200	1,619
Owen Sound	110	108	76	18	341	128	46	58	15	311
Paisley	114	105	......	29	250	188	......	......	20	251
Perth	164	122	49	......	336	......	207	118	......	387
Peterborough	146	123	......	......	269	34	95	85	25	274
Picton	113	84	......	......	197	......	148	5	20	194
Port Dover	35	60	43	......	191	74	65	26	13	211
Port Elgin	52	48	......	......	101	100	......	2	......	104
Port Hope	78	66	......	......	145	......	96	44	1	145
St. Catharine's	700	842	914	277	3,272	1,266	694	147	115	3,171
St. Thomas	115	68	25	......	208	80	19	51	......	209
Sault Ste. Marie	112	100	......	......	212	......	60	55	25	187
Seaforth	141	139	20	......	315	......	236	36	10	305
Simcoe	69	65	......	10	161	22	40	34	35	161
Smith's Falls	108	101	......	......	220	23	86	57	......	185
Springfield	60	72	......	......	127	......	......	13	10	127
Stirling	62	47	......	......	110	*69	73	31	......	183
Stratford	158	161	25	33	383	183	......	......	35	349
Strathroy	134	75	......	30	241	94	92	10	25	297
Thornbury	82	52	......	......	134	8	68	41	10	140
Tillsonburg	100	83	25	41	273	85	*26	49	25	273
Toronto	197	397	......	......	717	60	46	156	50	650
Vankleek Hill	61	106	......	50	233	128	30	15	......	223
Walkerton	67	48	......	......	115	113	......	20	20	173
Walkerville	145	100	50	......	372	35	132	65	......	256
Waterloo	148	143	......	......	296	......	180	74	40	330
Windsor and Sandwich	203	250	350	......	829	......	609	199	......	1,164
Woodstock	130	90	......	......	252	......	169	77	20	361
Totals	8,275	7,813	2,239	908	20,756	4,543	6,824	3,280	1,200	20,882

HORTICULTURAL SOCIETIES, 1908.

Name.	Expenditure in 1907, on which grant for 1908 is based.		Membership.		Legislative Grants.		
			1907	1908	1907	1908	1909
	$	c.			$	$	$
Amherstburg	new	......	....	116	....	100	90
Barrie	146	89	67	132	60	63	104
Belleville	275	59	94	76	133	107	61
Bowmanville	263	52	100	110	105	106	85
Brampton	380	67	155	169	133	156	120
Brantford	273	16	75	75	110	99	85
Cardinal	206	47	77	66	96	82	67
Cayuga	105	15	73	143	95	54	105
Clifford	424	39	102	108	138	148	141
Clinton	299	35	119	115	119	122	90
Cobourg	196	93	89	91	101	84	71
Collingwood	306	00	124	60	126	126	58
Durham	173	41	54	51	72	65	45
Elmira	160	83	68	75	56	67	64
Elora and Salem	98	30	43	52	59	42	36
Fergus	117	90	68	60	70	56	44
Galt	300	92	160	206	133	137	173
Goderich	63	22	66	80	63	40	55
Grimsby	88	94	52	105	46	42	74
Guelph	281	42	95	104	[illegible]	108	107
Hamilton	511	29	171	298	365	339	407
Hespeler	150	40	66	72	100	63	52
Kincardine	260	75	114	122	123	110	88
Kingston	476	15	230	263	189	209	189
Lindsay	173	49	104	93	81	83	67
London	437	17	241	202	388	404	337
Midland	97	90	85	91	76	56	54
Millbrook	134	62	59	57	64	57	47
Mitchell	231	57	112	111	97	101	78
Napanee	164	95	74	67	100	70	63
Newmarket	217	36	62	83	105	80	93
Oakville	173	91	86	102	78	77	71
Oshawa	new	......	....	....	....	....	* ......
Ottawa	1,043	56	377	1,010	690	725	1,133
Owen Sound	287	41	90	110	110	108	102
Paisley	212	75	136	114	109	105	90
Perth	287	24	128	164	154	122	135
Peterborough	266	97	147	146	133	123	104
Picton	183	55	98	113	84	84	77
Port Dover	173	01	41	35	84	60	57
Port Elgin	112	00	52	52	51	48	38
Port Hope	147	74	75	78	94	66	55
St. Catharine's	2,630	29	426	700	412	842	913
St. Thomas	153	31	77	115	76	68	80
Sault Ste. Marie	new	......	....	112	....	100	....
Seaforth	306	51	160	141	165	139	110
Simcoe	155	80	66	69	93	65	56
Smith's Falls	229	74	111	107	146	101	73
Springfield	204	80	50	50	100	72	43
Stirling	106	95	51	62	71	47	59
Stratford	422	53	137	158	166	161	125
Strathroy	132	68	110	134	125	75	106
Thornbury	103	19	68	82	45	52	55
Tillsonburg	236	00	60	100	58	83	91
Toronto	746	68	168	188	317	397	294
Vankleek Hill	335	90	52	61	50	106	70
Walkerton	95	54	63	65	75	48	57
Walkerville	new	......	....	145	....	100	10[illegible]
Waterloo	344	51	144	148	158	143	11[illegible]
Whitby	new	......	....	....	....	....	* ......
Windsor and Sandwich	643	21	223	203	244	250	31[illegible]
Woodstock	214	34	93	130	104	90	11[illegible]
Totals	16,968	83	6,288	8,088	7,524	7,813	7,79[illegible]

PRESIDENTS AND SECRETARIES OF HORTICULTURAL SOCIETIES.

Society.	President.	Secretary.	Secretary's Address.
Amherstburg	Oscar Teeter, M.D.	Rev. Thos. Nattress	Amherstburg.
Barrie	Geo. Vickers	J. A. MacLaren	Barrie.
Belleville	S. J. Wedden	W. Jeffers Diamond	Belleville.
Bowmanville	Richard Jarvis	J. A. McClellan	Bowmanville.
Brampton	T. Thauburn	J. E. Cooper	Brampton.
Brantford	E. W. P. Jones	R. Walter Brooks	Brantford.
Cardinal	J. Bradley	E. E. Gilbert	Cardinal.
Cayuga	W. Teasdale	W. J. Neale	Cayuga.
Clifford	D. Campbell	Jno. R. Scott	Clifford.
Clinton	M. D. McTaggart	Jos. Fair	Clinton.
Cobourg	Geo. M. Ferris	Major H. J Snelgrove.	Cobourg.
Collingwood	W. A. Hogg	Jas. Guilfoyle	Collingwood.
Durham	Jos. A. Rrown	Chris. Firth	Durham.
Elmira	Geo. Klinck	C. W. Schierholtz	Elmira.
Elora and Salem	Wm. Findlay	Jos. W. Love	Elora.
Fergus	J. H. Dick	J. C. Templin	Fergus.
Galt	J. P. Jaffray	A. G. Elmslie	Galt.
Goderich	Jas. Mitchell	W. Lane	Goderich.
Grimsby	Dr. J. R. Smith	C. W. Vanduzer	Grimsby.
Guelph	T. J. Moore	Wm. Ross	Guelph.
Hamilton	J. M. Dickson	J. O. McCulloch	Hamilton.
Hespeler	G. W. Tebbs	J. E. Warren	Hespeler.
Kincardine	J. C. Cooke	Jos. Barker	Kincardine.
Kingston	Lt.-Col. R. E. Kent	A. W. McLean	Kingston.
Lindsay	Dr. F. Blanchard	Fred J. Frampton	Lindsay.
London	R. W. Rennie	W. W. Gammage	London.
Midland	Robert Irwin	Robert G. Nesbitt	Midland.
Millbrook	A. T. Armstrong	W. S. Given	Millbrook.
Mitchell	C. H. Eisler	A. J. Blowes.	Mitchell.
Napanee	W. S. Herrington	Miss Jane E. Ham	Napanee.
Newmarket	G. E. Martin	Wm. Keith	Newmarket.
Oakville	Capt. E. A. Morden	J. Cavers	Oakville.
Oshawa		Wm. Merritt	Oshawa.
Ottawa	E. T. Mepsted	J. F. Watson	Ottawa.
Owen Sound	Wm. T. Lee	Miss Annie D. Stark	Owen Sound.
Paisley	Jno. Brown	F. E. Sheppard,	Paisley.
Perth	H. Taylor	W. J. Wilson	Perth.
Peterboro	Peter Campbell	H. L. Beal	Peterborough.
Picton	W. J. Carter	Walter T. Ross	Picton.
Port Dover	Jas. Symington	F. J. Taylor	Port Dover.
Port Elgin	J. J. George	W. A. Mitchell	Port Elgin.
Port Hope	H. Fulford	W. T. Greenaway	Port Hope.
St. Catharine's	W. B. Burgoyne	Miss L. A. Radcliff	St. Catharines.
St. Thomas	K. W. McKay.	W. J. Shaw	St. Thomas.
Sault Ste. Marie	Jas. Darling	J. H. Hugill	Sault Ste. Marie.
Seaforth	W. D. Hoag	Jno. F. Daly	Seaforth.
Simcoe	H. H. Groff	J. Thos. Murphy.	Simcoe.
Smith's Falls	Dr. McCallum	W. T. Ferguson	Smith's Falls.
Springfield	Rev. G. W. Andrews.	V. H. Chute	Springfield.
Stirling	Mrs. M. M. Potts	J. E. Morton	Stirling.
Stratford	C. C. Abbott	T. H. Lennox	Stratford.
Strathroy	W. G. Murray	R. F. Richardson	Strathroy.
Thornbury	Hy. Pedwell	Geo. Wright	Clarksburg.
Tillsonburg	V. A. Sinclair	W. W. Livingstone	Tillsonburg.
Toronto	H. R. Frankland	Chas. E. Chambers	Toronto.
Vankleek Hill	D. G. Mode	F. B. Bowden	Vankleek Hill.
Walkerton	A. B. Klein	Jas. Tolton	Walkerton.
Walkerville	C. J. Stodgall	Chas. D. Brown	Walkerville.
Waterloo	Christian Scheifele	J. H. Winkler	Waterloo.
Whitby	E. E. Starr	W. H. Wilcox.	Whitby.
Windsor and Sandwich	Stephen Lusted	H. J. McKay	Windsor.
Woodstock	J. W. Armstrong	Wm. R. Vroman.	Woodstock.